



Exploring paramedics' and first aid responders' mental health literacy and attitudes towards psychiatric patients: A cross-sectional qualitative study on South African paramedics, using semi-structured in-depth interviews.



Thesis submitted in fulfillment of the requirements for the degree **Bachelor of Arts Honours in Psychology** at The Independent Institute of Education, Varsity College.

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Declaration

I hereby declare that the Research Report submitted for the Psychology Honours degree to the Independent Institute of Education is my own work and has not previously been submitted to another university or higher education institution for degree purposes.

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Thank you, Sir.

Abstract

South African paramedics and first aid responders frequently encounter psychiatric patients in a high-pressure, stressful emergency setting, yet are limited by mental health literacy and societal stigma significantly affecting the quality of care provided. The study sets out to examine paramedics' attitudes, perceptions, and depth of mental health literacy concerning psychiatric patients to shed light on gaps in their understanding and approach. Through semi-structured interviews with participants, the thematic analysis revealed a complex interplay of empathy, frustration, and stigma in their responses. Participants describe challenges in categorising and managing psychiatric patients due to limitations of mental health education and legislation, often resorting to quick wit and simple labels, which affects their approach to care. Despite these limitations, many paramedics expressed a strong commitment to patient welfare, coupled with a desire for better training and resources to handle psychiatric emergencies more effectively. The findings contribute to the academic understanding of mental health literacy in South African pre-hospital care, offering insights that highlight the importance of target education and training to enhance patients' outcomes. This study provides a foundation for further research and practical interventions that could bridge the gaps in emergency mental health response, ultimately fostering more informed and compassionate care in the field.

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Introduction

Contextualisation

In pre-hospital medical care, paramedics play a crucial role in addressing the needs of those in emergencies, often involving individuals with psychiatric conditions (Todorova et al., 2022). Given the unpredictable and high-pressure nature of emergency medical situations, paramedics tend to be the first point of contact for patients who are experiencing a mental health crisis. Consequently, the mental health literacy and attitudes of paramedics towards psychiatric patients are important aspects that influence the quality of care provided during emergency situations. Mental health literacy is a diverse term revolving around three main aspects: knowledge and beliefs that assist in recognising disorders, prevention, and appropriate intervention (Kutcher et al., 2016). Ford-Jones & Chaufan (2017) have identified through the analysis of paramedics' perceptions that they possess a low mental health literacy. This low mental health literacy affects the paramedics' abilities around recognition, prevention, and appropriate intervention, which may lead to misuse of resources resulting in poor medical treatment. This highlights the importance of understanding the level of mental health literacy present in the pre-hospital industry and identifying the factors that influence it. Improving mental health literacy among South African paramedics could enhance these key aspects in relation to the treatment of psychiatric patients, ultimately leading to better patient outcomes and more efficient use of medical resources.

Rationale

Personal Rationale

As a student who is currently doing their honours in psychology with an interest in mental health advocacy, this study presents me with an opportunity to shed light on and attempt to bridge the gap between psychology and medical services. Hence, allowing me to align my academic pursuits with my passion for mental health.

Academic Rationale

It has been established that the suboptimal treatment of patients experiencing mental health crises is largely due to the lack of the understanding of mental health by South African paramedics and first aid responders (Ford-Jones & Chaufan, 2017). These findings highlight a notable gap in academic literature in understanding the depths of mental health literacy of South African paramedics in the pre-hospital industry. This study will address the academic gap by enhancing the understanding of the complexities involved in emergency mental health care delivery. This will be done through exploring, dissecting and analysing the perceptions and attitudes that are held by South African paramedics and first aid responders towards psychiatric patients.

Relevance to Psychology

The study highlights and explores the intersection between mental health and emergency medical care services. Which builds on key aspects surrounding the purpose of the psychology of understanding and improving the lives of others (Dweck, 1992; Pérez-Álvarez, 2018; Wahass, 2005). Through examining paramedics' and first aid responders' mental health literacy, this can shed light on the psychological factors that influence emergency care. This study highlights the importance of the interdisciplinary collaboration between psychological and emergency services when it comes to addressing mental health.

Problem Statement

South African first aid responders and paramedics frequently come across psychiatric patients in the context of emergency situations (Todorova et al., 2022). Here however, drawing on media from the Canadian context and academic literature from the UK, USA, and Australia context to inform this discussion, paramedics have limited mental health literacy as seen by their perceptions and care towards psychiatric patients (Ford-Jones & Chaufan, 2017). The limited mental health literacy among first aid responders and paramedics can lead to

suboptimal support and care during emergency situations for patients who can be identified as psychiatric. This can result in patients being denied care, released early, the excessive use of medication, or force (Evans et al., 2018; Mothibi, 2020). Currently, there is limited knowledge surrounding South African emergency responders' perceptions and attitudes towards psychiatric patients, specifically in relation to their limited mental health literacy. It remains unclear to what extent this level of mental health literacy affects their ability to provide appropriate care in emergency situations.

Purpose Statement

The purpose of this study is to comprehensively understand the perceived mental health literacy and the extent of mental health literacy among South African paramedics by exploring their perceptions and attitudes towards psychiatric patients, the factors they believe contribute to the literacy, and the perceived consequences of this literacy.

Research Question

What attitudes, perceptions, and depth of mental health literacy do paramedics' and first aid responders hold towards psychiatric patients?

Objectives

- To investigate the attitudes of paramedics and first aid responders towards psychiatric patients within South Africa, through examining their understanding, empathy, stigma, and willingness to provide care.
- To explore the perceptions that paramedics and first aid responders have regarding psychiatric patients within South Africa.
- To explore the lack of training or other factors that may affect the medical care approach to psychiatric patients.

- To evaluate the depth of mental health literacy of paramedics and first aid responders within South Africa.

Literature Review

Theoretical Foundation and How it Links to the Research Problem

Theory 1: Stigma Theory, by Erving Goffman (Erving, 1963)

Chaudoir et al. (2013) explores how Erving Goffman's Stigma Theory focuses and delves into social mechanisms through which individuals brand, ostracise, and stigmatise others. According to Erving Goffman, the stigma theory links the marginalisation and exclusion of people to the labels that society allocates them based on the perceived difference between them and societal norms (Chaudoir et al., 2013). This stigmatisation results in the individual falling part of the margined groups of society, where they will experience prejudice and discrimination (Pescosolido et al., 2008). Erving Goffman's theory further explores the complex process of how society attaches negative labels to these groups of individuals. These tend to be based on attributes that stand out, undesirable traits, or deviant behaviour (Pescosolido et al., 2008). Once these labels are affixed, this influences how stigmatised individuals are perceived and their positioning in the social hierarchy (Chaudoir et al., 2013; Pescosolido et al., 2008). The last section of this theory explores the internalization of these labels in stigmatized individuals, affecting their self-identity and interactions with others.

Erving Goffman's Stigma Theory can lay a framework for exploring how stereotypes and contextual societal norms influence the behaviour of South African paramedics towards psychiatric patients experiencing emergencies. The theory can assist in understanding the dynamics of the interactions between paramedics and psychiatric patients, through gaining insights into the stigmatized attitudes. For example, paramedics with stigmatized views and limited mental health literacy may unknowingly perpetuate negative stereotypes resulting in suboptimal care. Through the understanding of social mechanisms, the theory will highlight the critical role that the level of mental health literacy has on the paramedics creating

stereotypes towards psychiatric patients.

Theory 2: The Theory of Planned Behaviour, by Icek Ajzen (Ajzen, 1991)

The Theory of Planned Behaviour by Icek Ajzen suggests that human behaviour is influenced by three considerations, behavioural beliefs, normative beliefs, and control beliefs (Rajeh, 2022). The first consideration, behavioural beliefs, explores the idea that an individual's perception of the consequences of their behaviour influences their attitudes towards performing the behaviour (Bosnjak et al., 2020). This perception, in turn, affects the likelihood of the individual acting on that behaviour. The second normative belief refers to the social pressures and expectations moulded by social norms and the impact they have on the individual's decision-making, representing how society shapes the individual's actions (Bosnjak et al., 2020). The third is control beliefs, which centre around the perceived difficulty or ease behind the performing of the behaviour. The difficulty is influenced by factors that facilitated the behaviour or hindered it such as the perceived consequences (Bosnjak et al., 2020). Together these beliefs shed light behind on the individual's intention and motivation to engage in a specific behaviour.

Icek Ajzen's Theory of Planned Behaviour acts as a lens for examining the attitudes and perceptions of South African paramedics towards psychiatric patients during a mental crisis emergency. The Theory of Planned Behaviour can be utilized to understand how the considerations of behavioural, normative, and control beliefs shape paramedics' approach to emergency situations. The behavioural belief can highlight how the level of mental health literacy is a factor that can affect the paramedic's perceived outcomes of their interactions with psychiatric patients. Normative beliefs can reveal the social pressures and expectations impacting their behaviour, specifically towards expanding their mental health literacy through educational programs. Control beliefs can identify factors that either facilitate or limit their abilities to provide appropriate care.

Review of Previous Literature

Introduction

Paramedics have a crucial role in the process of emergency medical care, having multifaceted responsibilities that are key to providing effective care. As the initial point of contact with those in dire situations, they are required to address a spectrum of medical emergencies ranging from trauma to those with medical conditions. Parent et al. (2020) identified that there is an increase in medical emergencies with the presence of mental issues. However, their training and education do not delve into the level of mental health literacy, that they require for such emergencies. The following review of the literature intends to explore and examine training, barriers, and challenges concerning the treatment of psychiatric patients and the level of mental health literacy possessed by paramedics. This literature review will focus on three themes that are present in previous literature. The first section of the literature review will cover the theme of the training and education of paramedics. The second section will explore the theme of barriers to effective care for psychiatric patients. The last theme will explore literature relating to challenges faced by paramedics concerning the lack of training. The gap in literature will be explored throughout the three themes, in the context of each of the discussed studies.

Theme 1: Training and Education of Paramedics

It has been identified that there is an increase in mental health patients who require medical care for mental health episodes, and how paramedics when providing emergency medical care are the primary contact with said patients (Mothibi et al., 2019; Parent et al., 2020). The issue lies in the outdated nature of pre-hospital medical training, which lacks the essential components for managing patients experiencing mental health crises, a critical skill set needed by paramedics (Parent et al., 2020). It is identified that mental health literacy is only introduced to paramedics through external programs over their primary medical education (Parent et al., 2020). The study by Parent et al. (2020) was conducted in Australia, showing the gap in literature from the South African perspective. The study by Mothibi et al. (2019) is

a South African study but was isolated to a single province of the Free State and occurred before the COVID-19 pandemic. Bress (2014) identified a similar problem with first-aid responders within the city of Cape Town, in relation to Substance abuse patients. Identifying the further need for paramedics' training to consist of mental-related literacy and not solely on health literacy. Bress (2014) focussed on health literacy in general, while only touching on mental health literacy in the context of substance abuse. In South Africa, paramedics' training is structured across three levels: basic life support, intermediate life support, and advanced life support (Yared-West, 2021). However, these levels primarily emphasise reducing patient mortality rather than equipping paramedics with the mental; health skills needed to effectively support patients in psychiatric crises (University of Johannesburg, 2024). Homla et al. (2024) explore the benefits of a continued online learning program called the E-leaning system, allowing paramedics to have access to material that has the potential to expand their mental health literacy. The E-leaning system was employed at the Chiang Mai University marathon in Thailand (Homla et al., 2024). De Silva et al. (2015) explored the advantages that the introduction of a program based on mental health to the general medical educational system can have on paramedics. The program was developed for the University of Tasmania in Australia (De Silva et al., 2015). This program was centred on a course on suicide intervention and awareness, educating on an aspect of mental health literacy on top of their health literacy (De Silva et al., 2015). This showed a positive link between attitudes and a decrease in stigma towards suicidal patients by paramedics (De Silva et al., 2015). The study also explored how the introduction of the course not only increased the knowledge of paramedics but also the confidence in treating psychiatric patients (De Silva et al., 2015).

Theme 2: Barriers to Effective Care for Psychiatric Patients

The first major barrier draws a link to the previous theme, centred around the training that paramedics receive and their knowledge and understanding on how they should treat psychiatric patients (Todorova et al., 2021). This is a major barrier as their level of mental health literacy has the potential to affect their perceptions towards their patients and the choice

of medical care that is provided (Todorova et al., 2021). Todorova et al. (2021) explore the paramedics' own awareness of their level of mental health literacy and their perspective that they have for themselves and how it affects the ability to provide effective treatment to psychiatric patients. This Todorova et al. (2021) study was conducted in the county region of Skane in Sweden, highlighting a gap in the context of this study being in South Africa. Another barrier that is present in affecting the ability to provide effective medical treatment, is the stigma of mental illness held by paramedics due to the low level of mental health literacy (Brewster et al., 2022). Brewster et al. (2022) explored how Australian paramedics can overcome stigma. Brewster et al. (2022) identified that stigma towards psychiatric patients has the potential to affect the decision-making process in the pre-hospital environment. This may result in non-professional decisions being made, influenced by the stigma collectively held by paramedics who work in the same environment resulting in them providing inadequate care (Brewster et al., 2022). The next major barrier present would be when a psychiatric patient declines or refuses treatment and assistance (Nordby, 2013). This puts the paramedics in a predicament, as some psychiatric patients might not be in the right state of mind (Nordby, 2013). A patient in a critical emergency might deny treatment, regardless of whether their life is in danger, leading to the paramedic making a decision based on their understanding of mental illness (Nordby, 2013). The research by Nordby (2013) highlights a time gap, with the study being done over a decade ago. The last barrier that is present when treating psychiatric patients is the financial constraints that are associated with treating psychiatric patients (Kemp, 2019). Not all emergency medical care services have the resources and equipment needed to deal with psychiatric patients, nor do they have the financial resources needed to send their current staff of paramedics for mental health training (Kemp, 2019). Which in turn may result in less effective care for psychiatric patients. Kemp (2019) focused on psychological symptoms experienced solely by individuals with HIV or Chronic illnesses.

Theme 3: Challenges Faced by Paramedics Concerning the Lack of Training

A major challenge faced by paramedics due to their lack of training is their

stigmatisation of psychiatric patients and the act of removing the stigmas (Brewster et al., 2022). The stigmatisation tends to be ingrained into the paramedics, due to the lack of training in relation to mental health literacy, which makes it in turn difficult to remove, this generally would require education and multiple courses on mental illness to replace the stigmas (Brewster et al., 2022). The workload and attempt to deal with stigmatisation can be stressful and cause the paramedics to burnout (Brewster et al., 2022). Brewster et al. (2022) recruited participants by posting on the Australian and New Zealand College of Paramedicine, highlighting a gap in the level of experience that the paramedics have, with mostly recent graduates having access to the college's Facebook page, with those who have been in the field for over a decade and been exposed to a variety of psychiatric patients with the opportunity to overcome stigmatisation having a less likelihood of being in this study. The increasing number of patients with mental health conditions, combined with paramedics' need to manage these cases without adequate mental health training, has been shown to create considerable stress for paramedics as identified by Rolfe et al. (2020). This stressful nature surrounding consciously knowing their low mental health literacy, results in paramedics developing coping mechanisms (Rolfe et al., 2020). Rolfe et al. (2020) identified that their coping mechanism can be an aspect in further creating challenges as it is centred around creating stigmas for psychiatric patients. The coping is metaphorical and built around humour towards the psychiatric patients, this may consist of creating stereotypes to help manage stress in relation to treating this group of patients (Rolfe et al., 2020). The study by Rolfe et al. (2020) highlights a geographical gap in the literature, as it was conducted in the UK. Another major challenge that is created due to the lack of training is dealing with outcomes such as self-harm or suicide (Rees et al., 2017). This highlights the legal and ethical side of treatment (Rees et al., 2017). Paramedics who are faced with suicidal patients or those who have caused significant harm to themselves may be put in a predicament if the patient passes away (Rees et al., 2017). The loss of life due to inadequate knowledge of any mental health illness does not dismiss any legal action from being taken against the paramedics (Rees et al., 2017). Ethical issues can also be raised with paramedics for not treating and psychiatric patient who

refuses treatment while being in a critical state (Rees et al., 2017). The gap identified through the review of Rees et al. (2017), is centred around the type of crisis, with the study solely focussing on self-harm and no other mental crisis when it comes to emergency situations.

Conclusion

This literature review has brought forward the importance of paramedics and their critical role when it comes to emergency medical care. The reviewed literature highlights the importance of in-depth training that is required to address the wide range of medical emergencies, including the mental health crises. Through examining research around the key themes of training, barriers to effective care, and challenges faced by paramedics. The review identified a critical gap in research regarding South African paramedics' mental health literacy and attitudes towards psychiatric patients. This gap in research highlights the importance of context-specific and local geographical studies that should take into account the sociocultural, institutional, and systematic factors that shape paramedics' response to the mental health crises. Most of the review literature has taken place in Western countries, with most of them being done in Australia. By addressing this gap with this study, this research can contribute to tailored training and educational programs, altered policies, and support systems aimed at enhancing paramedics' ability to provide compassionate and effective care to psychiatric patients in South Africa.

Conceptualisation

Pre-Hospital

Pre-hospital refers to the period where medical care is administered to a degree before a patient arrives at a hospital (Stander et al., 2021). During the pre-hospital period emergency care practitioners (ECP) stabilise patients before they can receive long-term treatment (Rowland & Adefuye, 2022). In the context of the study, pre-hospital care will encompass the assessment, intervention and support provided by South African paramedics, this period starts with the paramedic's exposure to the patient till the arrival at the hospital or

if the care is denied.

Mental Health Crisis

A mental crisis in this context will be the experience of psychological disorder related to but not limited to mental distress, such as mania, psychosis, self-harm behaviour, attempted suicide, and substance abuse disorders (Shalit & Gettas, 2020; Wahlbeck & Mcdaid, 2012).

Psychiatric Patients

Psychiatric patients are individuals who have been diagnosed with a psychiatric disorder and are in need of treatment or intervention (Conrad et al., 2020). Their psychiatric disorder consists of a wide range of conditions including but not limited to depression, anxiety, bipolar disorder, and schizophrenia (Conrad et al., 2020). Petersen et al. (2016) identified that psychiatric patients is a term commonly associated with individuals who have common anxiety disorders which consist of anxiety, mood, and substance disorders. In the context of the study, psychiatric patients will be referred to individuals experiencing a mental crisis in a prehospital setting, who are currently receiving assistance from South African paramedics.

Paramedics

Paramedics are health professionals who have been trained in first aid up to advanced life support, to provide medical care to individuals in critical condition (Gage et al., 2020). They tend to be the first healthcare providers on the emergency scene and work in the pre-hospital industry (Baetzner et al., 2022). There are different levels of paramedics, they range from first aiders, basic life support BLS, intermediate life support ILS, advanced life support ALS, and emergency care practitioners ECP (Gage et al., 2020; Hackland & Stein, 2011). In the context of this study, paramedics will be referring to individuals with medical training in the pre-hospital industry who provide medical services to those in emergency situations, they will be working for a medical or public company and should be on active call.

Attitudes

Jasti et al. (2016) identify that in the context of the medical environment, attitudes refer

to the opinions, beliefs, and perspectives held by an individual towards people with mental disorders. Attitudes play a crucial role in guiding the perceptions, decisions, and behaviour of the paramedics in relation to their willingness to treat a patient (Wahl & Aroesty-Cohen, 2010). In the context of the study, attitudes will refer to the paramedic's beliefs, perceptions, and emotional responses towards psychiatric patients when interacting with them during a mental crisis.

Mental Health Literacy

Mental health literacy refers to an individual's understanding and knowledge of mental health-related issues, this would include the skills surrounding the ability to recognise the symptoms, allocate to the right mental illness, and provide an appropriate intervention (Wadsworth et al., 2023). Mental health literacy consists of identifying symptoms, providing treatment, and fostering supportive and understanding behaviour for the individual (Weber et al., 2023). In the context of the study mental health literacy refers to the level at which paramedics can identify conditions relating to mental health, and their knowledge of what type of treatment can be administrated in the short term to stabilise the patients.

Stigma

Stigma refers to the negative beliefs, attitudes, and behaviours surrounding and directed towards a specific group based on characteristics or attributes that they may possess (Chaudoir et al., 2013). Corrigan and Watson (2002) break down stigma into three main components, this consists of but is not limited to prejudice, discrimination, and stereotypes. Stigma has the potential to affect the quality provided by healthcare professionals such as paramedics (Corrigan & Watson, 2002). In the context of the study, stigma will be defined as the negative perceptions and discriminatory behaviour that South African paramedics exhibit towards psychiatric patients.

Research Design and Methodology

Outline of Paradigm

Overview

Paradigms can be described as the structure of scientific research, being the collective embodiment of views and beliefs held by a group of scientists (Mertens, 2012). There are two main types of paradigms when it comes to research, these consist of positivism and interpretivism (Du Plooy-Cilliers, 2021). The positivism paradigm is centred around seeking the objective truth, emphasising the backing of observable facts (Du Plooy-Cilliers, 2021). The interpretivism paradigm seeks to gain the subjective experience from a socially constructed reality (Du Plooy-Cilliers, 2021). Due to the nature of the study being exploratory, centred around gaining insight surrounding paramedics' mental health literacy and attitudes, this study's approach will be constructed around the interpretivism paradigm. Using interpretivism as a paradigm suggests that the methodology will be qualitative, as it will prioritise understanding the paramedics' and first aid responders' subjective experiences in relation to their social context (Bonache & Festing, 2020). Emphasising the construction of knowledge of the interactions of paramedics and their environment, interpretivism will allow for the deeper exploration of underlying social factors shaping mental health literacy. By prioritizing the collection and understanding of the attitudes and perceptions towards psychiatric patients, the research aims to uncover the level of mental health literacy and the dynamics that influence it, in the pre-hospital industry.

Ontological Position

The ontological position refers to how the researcher views reality, in relation to their understanding and beliefs on the nature of reality (Du Plooy-Cilliers, 2021). This is centred around the research question of what exists in reality, and how it exists in the world (Du Plooy-Cilliers, 2021). In the context of research, the ontological position considerations explore whether reality is objective and independent of human perception for positivism, or it being

subjective and socially constructed (Du Plooy-Cilliers, 2021). Hence, in the context of this study, the ontological position as being part of interpretivism recognises that reality is subjective and socially constructed (Ylönen & Aven, 2023). It emphasises the understanding of the paramedics' interactions and interpretations within their social context to comprehend their unique reality. In the context of this study, this position acknowledges that the attitudes and perceptions of paramedics are shaped by their social and cultural contexts within the pre-hospital environment. Hence analysing these attitudes and perceptions towards psychiatric patients can assist in understanding their level of mental health literacy and the approaches that they take in emergency medical situations with said patients.

Epistemological Position

The epistemological position is a perspective that a researcher would hold in regard to how knowledge is obtained and then after understood (Willig, 2012). In the context of research, this would consist of the approach taken by the researcher in the sampling, analyses, and validating of knowledge (Willig, 2012). The epistemological position in relation to interpretivism is centred around the idea that knowledge is constructed and understood subjectively, through individual's interpretation of their personal experiences in the social context (Du Plooy-Cilliers, 2021). Hence, the researcher's stance in the context of the study is that the knowledge that they intend to gain from the paramedics would be subjective. As a result, gaining knowledge on the level of mental health literacy would require an understanding of the paramedics' attitudes towards psychiatric patients concerning their personal interpretations within the context of emergency situations and their industry.

Axiological Position

The Axiological position refers to the researchers' values and what they value in doing a study (Fuyane, 2021). The axiological position in the context of interpretivism allows the researcher to recognize the subjective nature of knowledge and the importance of valuing the understanding of participants' perceptions (Du Plooy-Cilliers, 2021). In the context of the study, the axiological position in relation to interpretivism will be taken. This would emphasize

the significance of understanding the experiences and attitudes that paramedics have towards psychiatric patients. Through analysing these experiences will allow the researcher to delve deeper into the dynamics and level of mental health literacy present among paramedics. Acknowledging the value of the subjective viewpoints of paramedics would enrich the research process, contributing to a more comprehensive understanding of the research topic.

Research Approach and Design

The Methodology for the study will be qualitative aligning with interpretivism as the chosen paradigm. The research design will allow the researcher to gain an in-depth understanding of the unique subjective experiences and perceptions of South African paramedics regarding their mental health literacy and attitudes towards psychiatric patients (Busetto et al., 2020). The qualitative design allows for rich and detailed data collection with the focus being on the paramedics' personal experiences and individual perspectives. In accordance with the paradigm and research design, the study will be exploratory (Rowland & Adefuye, 2022). The exploratory nature of the study will allow for the researcher to identify and uncover new patterns and insights that have not been previously well documented. This is a key aspect, and it allows for understanding the relatively under-researched area of paramedics' mental health literacy in the pre-hospital industry. The study will take an inductive approach, which will allow for themes and ideas to come from the collected data (Woiceshyn & Daellenbach, 2018). This study will not start with a pre-existing hypothesis, this will assist in developing new concepts (Woiceshyn & Daellenbach, 2018). Finally, the study will be cross-sectional. The cross-sectional design consists of collecting data at a single point in time (Wang & Cheng, 2020). This will allow the researcher to take a snapshot of the current state of mental health literacy among South African paramedics.

Population

Target Population

The target population refers to the group of individuals that the researcher intends to

generalise their findings on (Thacker, 2019). The target population is a broad group of individuals who have characteristics that are relevant to the study, hence they fall within the population parameters (Thacker, 2019). Defining the target population allows for the research to be focused, making the result relevant to the group in question. The target population that has been selected for the study consists of paramedics who work in the pre-hospital industry within South Africa. The population of paramedics are required to be on active duty allowing them to be exposed to patients that can be classified as psychiatric. The target population of paramedics do not have a set required age or qualification. This allows the target population to be diverse in order to provide relevant information from the different qualifications and experienced groups. This group was chosen as they can provide data on the levels of mental health literacy due to their subjective experiences and perception of psychiatric patients in first-contact emergency situations.

Population Parameters

The population parameters are the specific attributes or characteristics of the individual that falls part of the target population, which makes them relevant to the study (Pascoe, 2021). The population parameters are vital as they help to define the criteria for inclusion in the study (Pascoe, 2021). Hence ensuring that the sample will accurately represent the population that is being studied (Pascoe, 2021). In the context of this study, the population parameters will be centred around occupation, educational level, and geographical location. The occupation will be individuals who are currently working as paramedics. Their educational level needs to be one of the following. basic life support BLS, intermediate life support ILS, advanced life support ALS, or emergency care practitioners ECP. The geographical location will consist of those residing and working in South Africa, specifically in the province of Gauteng.

Accessible Population

The accessible population is a subset of the target population that is reachable and available to the researcher for participation in the study (Thacker, 2019). The accessible population takes into account the limitations of the researcher in relation to geographical

location, consent, cooperation from individuals and organisations, logistical feasibility, and the researcher being a student with limited resources and time. In the context of this study, the accessible population consisted of paramedics available within Gauteng. South Africa faces a significant shortage of active paramedics, contributing to limited availability within the region (Lebuso, 2023). The proportion of paramedics holding Advanced Life Support (ALS) or higher qualifications is even less (Govender et al., 2023). Therefore, the accessible population for this study were Gauteng paramedics within the pre-hospital communities who, through association, were able to recommend to the researcher.

Unit of Analysis

The unit of analysis refers to the main entity that is the centre of focus and is being studied or analysed in the research (Bless et al., 2013). In the context of this study, it was the “who” that the research is investigating. Considering the objectives and the research question, the unit of analysis is micro, specifically the individual. The individuals are paramedics who met the previously mentioned criteria. These individual’s experiences, perceptions, and attitudes towards psychiatric patients are the basis of the data that was collected.

Sampling

Probability or Non-probability Sampling

This study employs a qualitative design. This study design requires the application of a non-probability sampling method. This study actively selected participants who were recommended by other participants who met the basic criteria listed in the target population and population parameters. The qualitative nature of this study combined with the small sample size of eight participants dictates the non-probability approach (Elfil & Negida, 2017). Non-probability sampling method is an approach to sampling in which not all the members of the target population have an equal chance of being selected (Boyd et al., 2023). Unlike probability sampling which relies on a large sample base and is centred on random selection to represent the population, non-probability sampling involves a smaller sample with

participant selection being based on the subjective judgment of the researcher (Elfil & Negida, 2017). The non-probability selection of the eight participants was done to gain a thorough understanding of the research problem to meet the study's objectives. This approach aims to gather as much detailed information as possible from a smaller sample size. Non-probability sampling has benefits that conveniently align with the researcher's limits, as it is low in cost, time efficient, and allows for the collection of relevant information (Boyd et al., 2023).

Sampling Method

The study used a combination of snowball sampling and purposive sampling. Snowball sampling is a non-probability method of sampling that is used with qualitative designed studies (Naderifar et al., 2017). This sampling method is particularly useful for a study where the population is hard to reach or hidden (Naderifar et al., 2017), such as a population made up of paramedics. The process begins with a small group of individuals as the initial participants, who fall under the criteria listed by the target population (Naderifar et al., 2017). These initial participants then assist in the recruitment process of other participants in order to expand the sample size (Naderifar et al., 2017). In the context of this study, the researcher approached an acquainted Advance Life Support ALS paramedic in the private sector who then acted as the initial snowball. This first participant in the study, through their professional relationships with other paramedics, acted as an initial link to the accessible population. This allowed the researcher to access other participants across Gauteng in the private and public sectors. This process of participant recruiting additional participants was repeated successfully.

The next sampling method involved purposive sampling, also known as selective sampling. This involves selecting participants from the accessible population based on a specific characteristic that is relevant to the research question (Andrade, 2021). This method allows the researcher to deliberately choose participants who possess particular qualities or experiences that are expected to provide valuable insights that would be relevant to the research objectives (Andrade, 2021). By focusing on these target attributes, the researcher allows for a small sample to more effectively reflect the broader population (Andrade, 2021).

In the context of the study, each participant on average, provided two to three additional participants. From these additional participants, the researcher would purposely select paramedics with diverse experiences and qualification levels compared to those who were already interviewed. This allowed for the sample population to consist of at least one individual with a qualification of Basic Life Support (BLS), Intermediate Life Support (ILS), Advanced Life Support (ALS), ALS with a Masters, and ALS in the process of obtaining a PhD.

The researcher initially planned to select participants through ER24 and its research department, with permission to interview their employees. However, time constraints associated with going through their board of ethics and the limited range of qualifications within the organisation led to the adoption of snowball sampling as the primary method, supported by purposive sampling. This approach facilitated access to a diverse group of participants with varied experiences and qualifications, creating a more accurate representation of the broader population.

Sample Size

In qualitative research, it is vital to gather sufficient data in order to achieve data saturation (Du Plooy-Cilliers, 2021). Initially, the researcher set out to sample 10 participants, but through the reviewing of the data felt that data saturation was achieved at 8 participants.

Data Collection

Data Collection Method

This study employed semi-structured interviews as the primary data collection method, as it aligns with the paradigm of interpretivism (Du Plooy-Cilliers, 2021). Semi-structured interviews are a qualitative form of data collection, that occur face to face. This type of interviews are designed in a way to collect rich detailed subjective insight into a participant's perspectives, experiences, opinions, and attitudes on a particular subject (Jamshed, 2014). The semi-structured nature as compared to structured interviews, allows for the process to be more flexible contributing to a conversational approach to the data collection.

This approach to interviewing involves a set of open-ended questions that guide the conversation while allowing the participant to freely express their personal thoughts or elaborate on their responses (Jamshed, 2014). This creates a balance for the researcher, allowing the researcher to cover key areas of interest while also capturing unexpected themes and information that could emerge during the interview process (Jamshed, 2014). This semi-structured approach enabled a comprehensive exploration of each paramedic's unique experiences concerning their interactions with psychiatric patients. The flexible format allowed the researcher to shift the focus as necessary among the participants' experiences, attitudes, and perceptions, while also encouraging participants to clarify and expand upon their responses as needed. The semi-structured interviews occur face-to-face. These in-person interviews allowed the researcher to observe the body language of participants. During the interviews, the researcher noted cases where the participants didn't understand the question and were reluctant to ask for an explanation, the observation allowed the researcher to restate the question and an explanation as to what the question was addressing.

Data Collection Application

A total of eight individual semi-structured interviews were conducted, with participants representing a wide range of experiences and qualifications. This variety enriched the interpretivism approach, allowing the researcher to capture diverse perspectives and variations in understanding. While some participants responded compressively to certain questions, enabling a smooth progression of the interviews, others required additional probing. The interpretive-aligned nature of semi-structured interviews empowered the researcher to delve deeper into those participants who initially offered brief responses, ensuring that each question provided sufficient data that aligned with the study's objectives and research question.

The data collection process started with the researcher contacting their acquaintance who fits the criteria to be a participant. This individual holds a position at ER24, which enables them to connect with various professionals throughout the industry. Due to their high

qualification and occupational position, they made the ideal candidate for the initial sampling, facilitating communication and potential recruitment of other participants. The first participant asked their associates if they would be interested in participating in the study, and the process was repeated. A collection of eight participants' contact information was gathered over a two-week period through snowball sampling. The researcher ensured that all eight participants met the population parameters that were previously listed.

After the information was gathered from a prior participant, the researcher would get their contact information. This occurred over a WhatsApp message, serving as the initial introduction to the study. After the introduction and the potential participants at the time asking relevant questions, they were asked if they would be interested in participating. Once a digital confirmation was received, the information sheet and consent form were sent to them via email or WhatsApp. After they read through the forms, a time and place were decided on as to where the interview would occur. Each interview was conducted face-to-face, allowing for more personal and engaging interaction. The researcher brought copies of the information and consent forms for participants to review and sign, ensuring transparency and facilitating an open dialogue about the study. This in-person approach fostered a sense of trust and rapport between the researcher and participants, which is essential in obtaining qualitative data. The interviews were conducted at the participants' workplaces such as at the fire station, paramedics' dispatch buildings, and headquarters, to ensure convenience and comfort for the participants. The interviews were conducted in accordance with agreed-upon dates. Ensuring that the data collected occurred at reasonable progress and was completed within two weeks.

An isolated room was located and used for each interview. Once all the consent forms were signed, two devices were placed nearby to record the participant's responses. All the interviews started with an introduction, with the introduction covering important aspects. Such as information reminding the participant that their participation is voluntary, they can refuse to answer any question, their responses will be confidential, and if they wish to, they can withdraw whenever they see fit. They were then thanked for their participation and any questions they had regarding the study were answered by the researcher. They were then

interviewed with a list of questions which were approved and reviewed by the IIE Varsity Ethics Committee, who also provided ethical approval for the study. The interviews had a variety when it came to how long they lasted, ranging between 10 to 35 minutes. To ensure participants' confidentiality, the recordings were then stored on an encrypted hard drive.

Data Analysis

This research employed Thematic Analysis as it aligned well with the interpretive qualitative design of this study. Thematic analysis as described by Braun and Clarke (2006), is a qualitative approach to data analysis that involves and identifies, analyses, and reports patterns through the creation of themes. These patterns are identified by organising the data into codes, with these codes being the building block for the creation of themes (Braun & Clarke, 2006). Braun and Clarke (2023) identified that subjective data is unique to each study and thematic analysis as a tool can be used as a foundation for explorative research and can be easily built on by further qualitative research and other analysis methods. In the context of the study researching aspects that are relatively untouched, thematic analysis was used by the researcher as the approach to the data analysis.

Thematic analysis was used for several reasons as it is suitable for inductive research (Braun & Clarke, 2006). Firstly, it was a straightforward method, which makes it suitable for the researcher who was inexperienced and new to qualitative research methodology (Korstjens & Moser, 2018). It is flexible while still being able to produce comprehensive data that is trustworthy and insightful to the research problem. Additionally, with the study being explorative, the thematic analysis does not have the more rigid constraints of other analytical frameworks (Braun & Clarke, 2006). Thematic analysis is well-suited for research that attempts to explore multifaceted research that delves into perceptions and attitudes of paramedics, making the ideal data analysis method. In the context of the research, thematic analysis was used to identify key themes that address the lack of knowledge revolving around the paramedic's attitude and perceptions towards psychiatric patients.

Data Analysis Method

The Thematic analysis used in the data analysis follows six steps. Braun and Clarke (2006) identified the steps to be a familiarisation of data, generations of code, creating themes, reviewing themes, defining and naming the themes, and reporting creation. The researcher used Braun and Clarke (2006) as a guide in the data analysis.

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Step 1

The researcher familiarised themselves with the data beginning at the data collection stage by being present during the interviews. This involvement in the interview included taking notes on participants' responses and observing their body language, which provided the initial exposure to the raw data. The majority of familiarisation occurred through the transcription of the audio recordings. Manually transcribing the audio recordings allowed the researcher to capture details that might have been missed during the note-taking and in-person observations. This process ensures the researcher gains a comprehensive understanding of the data. Braun and Clarke (2023) emphasise the importance of manual transcriptions, as it plays a crucial role in helping the researcher become deeply familiar with the data. During the process of transcribing and referring to notes and the research objectives, the researcher identified similarities between the interviews. This allowed the researcher to become familiar with the paramedics' individual views on psychiatric patients and the opinions of other paramedic's mental health literacy levels. By the end of the transcription, the researcher was well-versed in the paramedics' views and perspectives, this allowed the researcher to move onto the second step.

Step 2

The first codes were identified by the researcher during the latter stages of familiarizing themselves with the data. Coding in thematic analysis in its most basic form is the uncovering of patterns within the data (Naeem et al., 2023). This involves placing and organising the data in systematic patterns where sections can be identified to share some form of meaning (Naeem et al., 2023). During the coding process, the researcher sets out to identify segments of data such as words and phrases that capture the essence of what the data is representing. In the context of this study, codes of dehumanisation, professional development, patient autonomy vs implied consent, and humanistic approach were identified. The researcher achieved this by reading and then highlighting quotes that seem to share meaning throughout all eight interviews, these quotes were grouped under their shared meaning and labelled by a code that represents them. The transcripts were broken into segments in relation to the questions that were asked at the time, each segment was analysed individually in correspondence with the identical segment from each of the eight interviews. This is how the initial codes were identified. Afterwards, the researcher looked for the identified code through the other segments to see if they came up at the different sections of the interviews. The researcher listed the codes and quotes underneath each other to ensure that were comprehensive. This process resulted in the change and modification of codes until the researcher was confident that they had the potential to address the research objectives.

Step 3

These codes were used as the basis for the creation of themes (Naeem et al., 2023). Considering the literature review into consideration and the research objectives, the researcher aimed to organise the codes into distinct groups and clusters. These clusters of codes served as the basis of the theme. The themes that were created as a result of these clusters were the behaviour and views, paramedic education, and ethics. The researcher ensured that these themes addressed the research question and fairly represented the subjective views of the participants.

Step 4

The fourth step of thematic analysis involved the reviewing of the themes (Naeem et al., 2023). This step sets out to ensure that each theme accurately represents the collected data. This process involved the reviewing of the collected quotes that relate to the codes that were placed under each theme. During this process, the researcher was not too confident in one of the themes, though the theme did accurately represent what the participants said, there was a place for adjustment. The theme of behaviour and views had codes that shared meaning and other codes that contradicted each other. This resulted in the theme being broken into two sub-themes, with a slight change to the names of some codes. The first sub-theme is attitudes, which consist of outward negative responses towards psychiatric patients. The second sub-theme is perceptions, which consist of the positive internal response towards psychiatric patients.

Step 5

The fifth step to thematic analysis involves conceptualising the themes (Naeem et al., 2023). This step is the final part of understanding how the themes relate to each other and to the research question. Then placing an acceptable title to the theme that allows the researcher to easily understand what the theme represents and how the themes are linked to the overall objectives of the study. In the context of the study, the researcher created three themes and two sub-themes. The main theme names are *Behaviour and views of paramedics*, *Resources and training needs*, and *Ethical dilemmas*. The First theme is broken down into two sub-themes. These are the *Attitudes towards psychiatric patients*, and *perception and empathy*. The theme of *Behaviour and views* of paramedics explores the internal and external expression towards psychiatric patients. The sub-themes of *Attitudes towards psychiatric patients*, and *perception and empathy* cover the negative and positive expressions towards psychiatric patients respectively. The theme of *Resources and training needs* covers the education in relation to mental health literacy that paramedics receive, as well as other forms of training that they might be exposed to throughout their careers. The theme of *Ethical*

dilemmas explores challenges that arise that can be described as an ethical problem, as there is no clear answer as to how they can approach the situation. This allowed the researcher to put their finding into a narrative form, without verballing stating all the codes (Braun & Clarke, 2006).

Step 6

The final step involved reporting the findings (Braun & Clarke, 2006). This involves taking the findings and writing them out in a report where the themes and their significance are presented in a coherent narrative (Braun & Clarke, 2006). This report of the findings will allow for the themes to be conveyed to any stakeholder that is interested in the research, in a comprehensive document. For this study, the final report will detail the major themes related to paramedics' mental health literacy and attitudes towards psychiatric patients.

Trustworthiness of Findings

In qualitative research, the trustworthiness of a study is built around five key points. These are credibility, transferability, dependability, confirmability, and reflexivity (Korstjens & Moser, 2018).

Credibility

Credibility in qualitative research refers to how much truth is there in the findings of the study (Korstjens & Moser, 2018). Credibility assesses whether the study accurately represents the participant's original data based on their subjective experiences (Korstjens & Moser, 2018). Reinforcing credibility can be achieved through a variety of methods, such as prolonged engagements and confirming results with the participants (Korstjens & Moser, 2018). In the context of this study, confirmability was achieved through pronged engagement with the participants, confirming their responses, at the end of the interviews asking if there were any questions they would like to go back to, and asking if there were any information they would like to have added to any answer. To maintain credibility the researcher asks participants to

confirm that the interpretation was accurate, reasonable, and represented their subjective experiences.

Transferability

Transferability refers to the extent to which the study results and findings can be applied to other contexts with similar environments or participant characteristics (Korstjens & Moser, 2018). To enhance transferability, the researcher implemented strategies designed to provide a comprehensive understanding of the study's setting, processes, and participants. This involved the study delivering an in-depth description of the research process, which included details regarding the paramedic's participants, the interview procedure, and the nature of the questions posed. Additionally, the researcher thoroughly outlined that the sourced participants had different levels of experience, educational backgrounds, and professional roles. The focus of the study questions centred on the participant's role and work in the emergency environment, rather than specifically on their occupation, with specific emphasis placed on documenting the nuances of their interaction with psychiatric patients. Thus enabling other researchers to assess how these findings might transfer to similar settings where mental health literacy and patient interactions are focal areas of interest, such as firefights and police officers.

Dependability

Dependability refers to how the research results and findings hold against time. This will require the research to be detailed and well documented, in relation to the process be logical, traceable, and clear as identified by Korstjens and Moser (2018). This was achieved by seeking feedback from some of the participants to evaluate the results and confirm that their own interpretations aligned closely with the researcher's findings. Additionally, the researcher provided a breakdown of the codes from the thematic process, allowing the findings to be transparent for the participants.

Conformability

Confirmability refers to whether the findings of the researcher will be similar to that of another researcher's interpretation of the data (Korstjens & Moser, 2018). Confirmability in this study was assessed to ensure that the findings were not influenced by the researcher's personal opinions but were instead fully grounded in the data collected from the participants, as recommended by (Korstjens & Moser, 2018). This was established by the researcher by allowing peers to review their findings and having them offer their perspectives and opinions on the study's conclusions.

Reflexivity

Reflexivity as done by the researcher refers to the process of being critical of themselves, through acknowledging their biases, preferences, and preconceptions (Korstjens & Moser, 2018). This is centred around the researcher's understanding that their interpretation of the participant data might not be accurate (Korstjens & Moser, 2018). Reflexivity is vital as it ensures objectivity by the researcher to the participants' subjective experiences (Korstjens & Moser, 2018). In the study, the researcher is a psychological student who understands mental health crisis and the struggles that come with it. The researcher took into consideration that there might be biases surrounding the paramedic's attitudes regarding stigmatisation. To address this, the researcher attempted to take a neutral position with the participants and have a detailed breakdown of coding and theme creation to counter this bias.

Ethical Considerations

Ethical Considerations Relating to Participants

To uphold ethical standards within the study, several fundamental principles were adhered to, including non-maleficence, beneficence, and fidelity (Bless et al., 2013). The principle of non-maleficence aimed to ensure that participants were not subjected to intentional or unintentional harm during the research process. This was achieved through ethical considerations of confidentiality and discontinuation, ensuring that their information was

secured, and the participants held the right to withdraw from the study at any time without consequences. Given that the perceptions and attitudes of paramedics could potentially influence their work environment, it was crucial to protect any sensitive information that could adversely affect their professional standing. Consequently, all participants' data was treated with strict confidentiality, accessible only to the researcher and the researcher's supervisor (Bless et al., 2013). Participants were informed in the information sheet that their contributions would remain confidential and that any information that may identify them would be safeguarded.

Ethical Considerations Relating to Other Stakeholders

The researcher was committed to ensuring ethical integrity in relation to data handling, analysis, and reporting of findings (Bless et al., 2013). A strict policy was established by the IIE Varsity College and enforced by the researcher's supervisor that would hold the researcher accountable, preventing the fabrication of data or the manipulation of analyses to produce more favourable results, which is critical to maintaining the integrity of qualitative research. As an Honours student, the researcher ensured that all transcripts and audio files remained accessible to the supervisor, thereby promoting transparency and accountability throughout the study. In addition to this, the researcher engaged with periodic submissions of sections of the study ensuring engagement with the supervisor to further validate the research methodology and findings. The intention was not only to enhance the credibility of the study but also to ensure that the research was relevant and valuable to the academic community. Upholding these ethical considerations, the research sought to uphold the reputation of IIE Varsity College, ensuring that the benefits of the study outweighed and potential risks.

Limitations of the Study

As the researcher was an Honour student at the IIE Varsity College Sandton, several limitations were inherent in the study. A significant limitation was the researchers lack of experience, as this was the first study conducted independently. This inexperience had the potential to impact the quality and credibility of the findings, particularly given that the thematic

analysis and data collection were carried out by someone who was not experienced in these methodologies. Additionally, the available resources posed another major limitation, as being a student meant access to fewer resources which could the depth of the research. Time constraints, dictated by due dates for the completion of the research, further hindered the researcher's ability to confirm the interpretation with all the participants, as some of their schedules were placed outside of the province, potentially compromising the accuracy of the findings. Furthermore, participant access was complicated by the requirement to collaborate with private medical companies, which involved a six-week waiting period for ethics board approval. Hence, one of the reasons for the employment of snowball sampling.

Findings and Interpretation of Findings

Presentation of the Findings

This section presents the findings derived from the analysed data collected throughout the research process. It aims to address the research questions and objectives by critically examining the data through thematic analysis. This process involves evaluating the themes identified from the transcripts in relation to the overall purpose of the study. By integrating the research objective, relevant theories, and literature review with the analysed data, this section will provide a comprehensive outcome. The themes generated during the thematic analysis of the data serve as the primary means of representing the findings. The themes will act as a foundation to explore the identified theories and relevant aspects of the literature review, encapsulating the participants' subjective experiences in the pre-hospital industry. As illustrated in Figure 1, the researcher will utilize the themes of *Behaviour and Views of Paramedics*, *Resources and Training Needs*, and *Ethical Dilemmas* as the core sections for the findings. By structuring the findings in such a manner, this section will offer a holistic view of the study's outcomes and their implications. The findings not only aim to fulfil the objectives of the study but also provide a basis for further research on paramedics' mental health literacy and inform potential educational programs.

In addressing these considerations, the overarching research question guiding this study is: What attitudes, perceptions, and depth of mental health literacy do paramedics and first aid responders hold towards psychiatric patients?

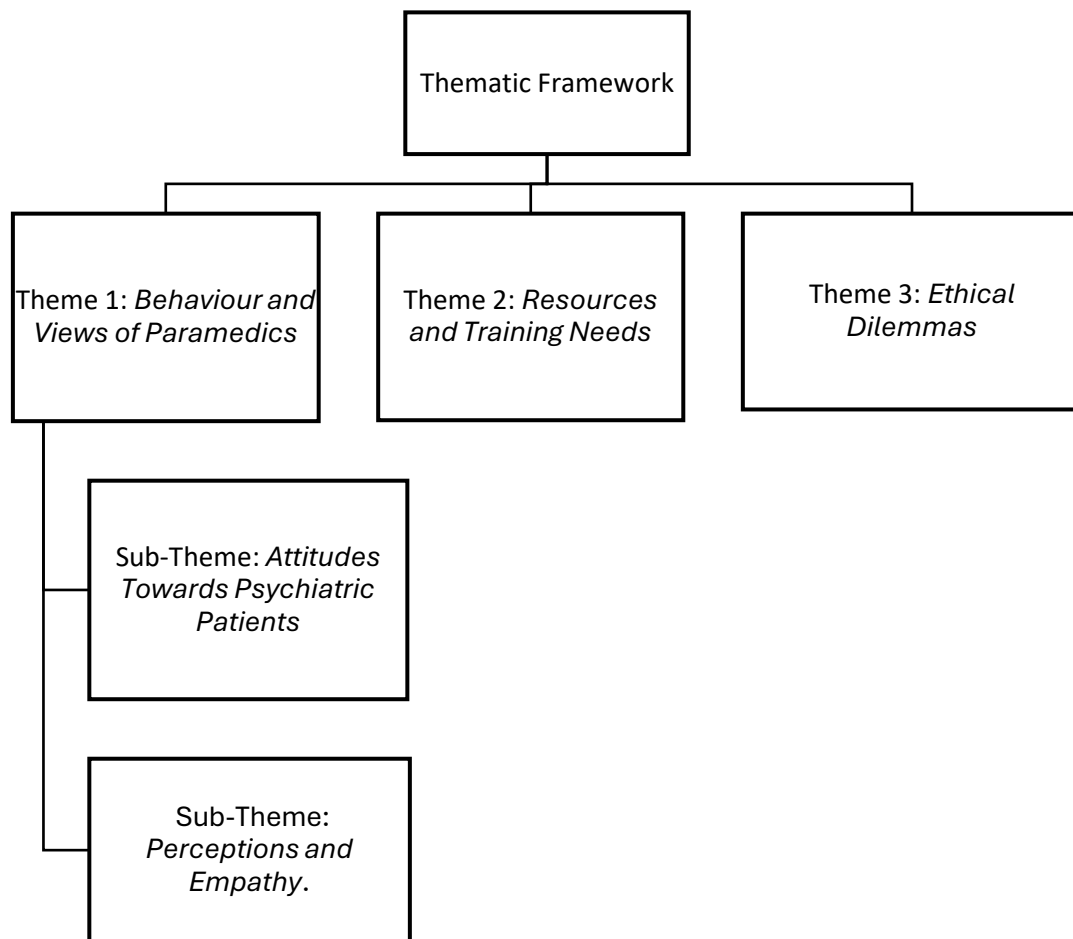


Figure 1: Thematic Framework Analysis

Interpretation of Findings

Theme 1: Behaviour and Views of Paramedics

Sub-Theme 1: Attitudes Towards Psychiatric Patients.

As previously mentioned, the theme of *Behaviour and Views of Paramedics* was initially one. The theme was broken down into two sub-themes, with each sub-theme representing polarized data taken from the participants. This sub-theme *Attitudes Towards Psychiatric Patients* in its basic form primarily addresses the negative views that paramedics may have or show towards psychiatric patients, particularly the attitudes that they hold. It must be emphasised that these negative attitudes are not universal among all paramedics, rather they are often influenced by external factors and prevailing societal norms within the profession. Regardless of whether these negative attitudes are present in all paramedics, it has been observed by seven out of the eight participants that the paramedic community hold some disdain and negative attitudes towards psychiatric patients.

This can be seen among some of the participants, with Participant Four stating “They all think they are god”, and Participant Eight sharing past experiences, that old colleagues called them “Mike Charlies for Mad Cow”. Mad cow is a play on words for mad cow disease and psychiatric patients being “mad”. Regardless of participants’ awareness of their own biases, it is striking that all referred to psychiatric patients or any patient on recreational drugs with their mental state being unstable as “psychs”. The striking aspect of the stigmatised name is not that it is a shortened term for psychiatric patients but rather a way to separate these patients from others in a derogatory manner.

This shows that the stigma theory by Erving Goffman (Erving, 1963) is applicable here. This Societal norm has been formed within the pre-hospital industry and the use of stigmatising labels such as “psychs” is reinforcing these negative attitudes towards psychiatric patients. This leads to behaviour such as “Let’s go fight a psych for instance. That’s the common terminology.” stated by Participant Six. A notable term that is associated with psychiatric patients that relates to stigma theory (Erving, 1963), is “aggressive”. The

paramedics place psychiatric patients into two categories, this being aggressive or not, which further reinforces negative perceptions that contribute to the stigma associated with mental health.

Three major contributors have been identified as influencing the attitudes toward psychiatric patients within the paramedic communities. The first contributor is the influence of the older generation of paramedics on the younger generation. The older generation of paramedics' limited mental health education will be further explored under the theme of *Resources and Training Needs*. The mental health literacy provided to the previous generations was considerably lower, resulting in a gap in knowledge and understanding. Participant 1 noted that "the older generation was never taught to acknowledge or accept that there are mental health illnesses". Additionally, legal restrictions permit only higher qualified paramedics to administer medical sedation, which reinforces the authority of more experienced practitioners, as Participant Five observed, they can "force sedation...higher qualified paramedics". Consequently, this environment creates a community that often looks up to and emulates the views of the older generation regarding mental illness.

The second factor is the general lack of training in handling psychiatric patients, particularly those experiencing psychosis or detachment from reality. This knowledge gap often leads paramedics to rely on physical force as a solution, which patients in a compromised mental state may interpret as aggression, triggering reactive aggression. Participant Three describes such an incident, stating, "If he was gonna attack the mother. I was gonna put him down". This is the result of a lack of education on how to interact with psychiatric patients, on another note paramedics tend to compromise and use deceit to get cooperation, "lie to them" stated by Participant Four.

The final contributing factor is the high-stress nature of the occupation, which leads paramedics to adopt coping mechanisms such as emotional detachment, as noted by Participant Eight "part of the ways we cope with that kind of stuff...distance ourselves emotionally".

Sub-Theme 2: Perceptions and Empathy.

This Sub-theme *Perceptions and Empathy* contrasts the previous sub-theme, by highlighting that, although the paramedics hold some negative attitudes towards psychiatric patients, many are self-aware of these biases and have a desire to improve their approach. Paramedics work in an occupation that exposes them to scarring imagery as they help individuals in emergencies. Seven out of the Eight participants express their continued commitment to the field and their dedication to helping patients, including those with psychiatric needs. For instance, Participant Three emphasised, "Treat them with care, treat as a person, in the end they are still a person." Similarly Participant Seven stated "talk as calm as I can. You try and be as unimposing as you kind of can". Participant Eight noted "this is the person who needs help. So let's go do it". These statements underscore that, while the pre-hospital industry environment may propagate stereotypes and stigma, many paramedics retain their core mission of patient care and empathy. This commitment also brings frustration, as many paramedics feel restricted by a lack of adequate resources and training, which limits their ability to provide the level of care they aspire to offer. This frustration can be seen by the response of Participant Five, stating "Trying to be calm. And also I think understanding more about the psychiatric distribution".

A link can be drawn between this Sub-theme and the literature where the theory of planned behaviour by Icek Ajzen (Ajzne, 1991). The theory of planned behaviour (Ajzne, 1991) offers a relevant framework for understanding this internal conflict. According to the theory, behaviour is shaped by one's attitudes, social norms, and their perceived control over the situation. Highlighting the internal conflict, while influenced by pre-hospital norms that may stigmatize psychiatric patients, are also motivated by a genuine desire to help, creating a tension between personal values and ingrained negative attitudes. The first consideration of the theory of planned behaviour (Ajzne, 1991) is the attitudes towards behaviour. This can be seen by how the paramedics, despise the negative attitudes, which affect their behaviour to further assist a psychiatric patient. A manifestation of this tension in relation to the first consideration of the theory of planned behaviour (Ajzne, 1991) can be seen in how paramedics

attempt to understand the broader context of a patient's condition, such as the influence of family dynamics. For example, Participant One observed "I find that if you face the family there. The family tries to influence you", and Participant Three stated that the patient "wants to fight with the family on scene". These insights demonstrate an attempt to engage with the patient's holistic experiences. Additionally, paramedics often modify their approach to reduce the perceived threat as Participant Six described "instead of taking the whole bag with us. It's better because it comes over less threatening". This adaptive behaviour highlights a commitment to empathic care even within the constraints of integrated stigma.

Theme 2: Resources and Training Needs

The second theme explores one of the factors that is associated with low mental health literacy among paramedics. When it came to paramedics and education regarding mental disorders, in some cases, it is almost non-existent as seen in Participant Seven stating that "Minimum, unless unless you are in ALS level. The training is almost minimal". It can be identified that the training for paramedics regarding mental disorders is directly linked to the responsibilities that they have. In the context of medication, Participant Six and Participant Eight are both advanced life support (ALS), they discuss that only ALS-level paramedics can carry and dispense the high-end medication. As seen in the literature on the responsibilities of different qualified paramedics (University of Johannesburg, 2024). The medication that is used for sedation of psychiatric patients falls part of this list. As a result, the lower qualifications do not receive any formal education regarding mental disorders. This excludes drug-induced psychosis, but the education is centred around trying to figure out which recreational drug was used. Participant One reinforces this by sharing his experiences in health care education stating that "The lower level qualification like the Basic Life Support, mainly the basic life support don't ... so they don't get a lot of time to focus more in depth on mental health illness", with Participant Three agree to this by describing the mental education "there is none, the scope there is minimum for basic life support". This doesn't necessarily mean that ALS can fill the role of possessing the highest mental health education as seen by Participant 7 description

“very little, it was condensed to 1 lecture about an hour. On , on treatment wise but then ... on different disorders, it was a bit more in-depth”. The low mental-health literacy levels were further confirmed when the participants were asked about the different types of disorders. Excluding the highest qualified ALS, the answer was three types, schizophrenia, bipolar, and depression. This aligns with the previously discussed literature, that mental disorder education with paramedics is inadequate (Parent et al., 2020).

Paramedics noted the importance of continuous learning programs (CLP) to maintain skill proficiency but highlighted the limited training for handling psychiatric patients. Participant Seven noted this shortcoming, stating that “there are almost no additional training that’s done for the handling of psychiatric patients “. For paramedics who have an interest in improving their mental health literacy, CLP system allows them to voluntarily access mental health literature. However Participant Seven observed “but there is almost nothing apart from maybe some literature that you can read to get points”, indicating a lack of structured support or in-depth training specific to psychiatric care. This gap is notable in light of findings in the literature review by Homla et al (2024), whose study on mental health CLPs in Australia demonstrated that targeted psychiatric training benefits both paramedics and patients.

The researcher noticed that some paramedics brought up the idea of consulting with a specialist. Some participants showed that they were aware of possible resource limitations. Educating all the paramedics on mental health literacy can be a stress on the organisations responsible for providing the educational programs. Other participants brought up experiences when they consulted with a psychiatric patient psychologist/psychiatrist during an emergency, and it was quite helpful. Participant Eight highlights that the limited mental health literacy levels can be compensated by having a specialist stationed at the branch whom they can consult with “so perhaps a specialist in the field we could contact”.

Theme 3: Ethical Dilemmas

Two major ethical dilemmas emerged during the interviews, both centred on the scope of paramedics’ actions regarding psychiatric patients. These dilemmas pertain to what

paramedics are legally allowed to do versus what they should do to assist psychiatric patients. The first dilemma involves the constraints set by legislation and existing medical acts. When a psychiatric patient is assessed by paramedics, the primary goal is to transfer the patient to a hospital. This usually proceeds without issues if the patient consents, in some cases psychiatric patients refuse assistance and a hospital transfer. This is a problem as most psychiatric patients require medical treatment, if a patient requires medical assistance the paramedic cannot leave the scene until “signing a refusal hospital transfer form” as identified by Participant Six. However, complications arise when a psychiatric patient in distress refuses hospitalisation yet is not fully lucid, rendering them unable to legally sign the refusal form. In such cases, the paramedics are required to remain on the scene, as leaving a potentially unstable individual unattended may violate the duty of care. In such scenarios, sedation may be considered, allowing for involuntary admission and transfer if the patient poses a risk to themselves or others. Yet, the ethical complexity is heightened by paramedics’ limited ability to assess the mental state accurately. Some of the participants shared similar scenarios where they were dealing with a psychiatric patient and spent a long period of time on the scene. As they could not determine the mental state of the patient. This often leads to them relying on simplified categorization of “violent” or “non-violent”. The simplified classification system restricts their response options, as Participant Eight noted “Its just either you’re violent or non-violent ... if you are not violent, then we won’t do much for you in particular”.

This leads to a lot of grey areas in legislation. This touches on patient autonomy vs implied consent. Participant eight stated ‘am I violating their right to autonomy? Or am I applying the principle of implied consent’. The absence of clear guidelines in legislation specifying the symptoms of psychiatric conditions that warrant paramedic intervention complicates the decision-making process. This ambiguity can lead to challenges when paramedics must justify their actions to family members who may insist on restraint for a patient in distress, leading to a barrier to effective care. Participant Six stated that “I’ve got a snippet of the mental health act on the phone”, emphasising his proactive approach to these complex situations which require an explanation of the mental act regarding involuntary

admission, on whether they can or cannot restrain the patient (Health Professions Act, 1974). This highlights the need for clearer legislative guidelines and improved mental health literacy among paramedics to navigate these ethical challenges more effectively.

Conclusion

Summary of Findings as they Relate to the Research Question, Problem, and Objectives

The Findings relating to the Research question

The research question: What attitudes, perceptions, and depth of mental health literacy do paramedics', and first aid responders hold towards psychiatric patients? The research question is a central point of the study. The analysis of the data and findings indicate a complex interplay of attitudes and perceptions among paramedics regarding psychiatric patients.

The findings revealed a notable presence of negative attitudes, often reinforced by societal stigma and the paramedic's professional environment within the pre-hospital industry. The participants expressed discomfort and frustration when dealing with psychiatric patients, with the use of labels such as "psych" and language reflecting a tendency to categorise individuals as either "violent" or "non-violent". However, alongside these negative attitudes and perceptions, many paramedics demonstrated a sincere desire to provide compassionate care, highlighting an internal conflict between their societal views and empathetic instincts.

The depth of mental health literacy among paramedics varied significantly. While some paramedics exhibited a foundational understanding of psychiatric disorders, others acknowledged gaps in their knowledge. It was concluded that this is a result of poor mental health education falling within the scope of health care.

The Findings Relating to the Problem Statement

The findings of the study directly address the problem statement regarding the challenges faced by South African paramedics when encountering psychiatric patients in emergency situations. The research corroborates with the existing research indicating that paramedics often possess limited mental health literacy, which significantly influences their

attitudes, perceptions and care of psychiatric patients (Ford-Jones & Chaufan, 2017).

The study highlights that while paramedics encounter psychiatric patients frequently, their attitudes are often informed by societal stigma and inadequate training. Many participants expressed their discomfort and frustration when faced with psychiatric emergencies, leading to stigmatising labelling. Such perceptions can affect the care they provide, as they rely on quick assessments due to limited mental health literacy, as they cannot comprehensively understand the patients' mental states. This aligns with concerns that limited mental health literacy can lead to detrimental outcomes regardless of intentions, such as the use of sedation be it medical or physical force (Evans et al., 2018; Mothibi, 2020)

Moreover, the study highlights paramedics' desire for the urgent need for enhanced mental health education and resources within South Africa's pre-hospital training framework. The disparities in knowledge regarding psychiatric conditions indicate that many paramedics are ill-equipped to provide appropriate care.

The Findings Relating to the Objectives

The study findings adequately address each objective of this study.

Investigating attitudes: The research paramedics exhibit a range of attitudes towards psychiatric patients, often consisting of a blend of empathy and stigma. Participants acknowledged the importance of treating psychiatric patients with respect and care, however, many also expressed discomfort. Indicating that societal stigma and legislation limitations can overshadow their willingness to provide compassionate care. This duality highlights complex interactions between attitudes, obligations, and personal perceptions.

Exploring perceptions: The findings reveal that due to limited mental health education and societal stigma, paramedics view psychiatric patients through a narrow lens, categorising them into “violent” and “non-violent”. This perception affects their approach to medical treatment. Many rely on quick assessments as they cannot rely on thorough evaluations of a patient's mental state. Such limited perceptions play a key role in leading to inadequate care.

Exploring lack of training: A significant finding of this study is the identification of gaps in the training regarding psychiatric care and mental health among paramedics. Many

participants noted that their formal education on mental health disorders is minimal, which impedes their ability to provide effective medical care for psychiatric patients. This aligns with the objective of exploring factors affecting medical care, indicating that inadequate training directly contributes to their challenges in managing psychiatric cases effectively.

Evaluating mental health literacy: The findings of the study confirm that the depth of mental health literacy among paramedics is insufficient. Participants demonstrated a limited understanding of various psychiatric disorders, which their decision-making during emergency situations. This lack of mental health knowledge not only compromises the care provided to patients but also reflects the broader systematic issues within the training of emergency responders.

Anticipated Contribution of the Study

This study aims to contribute valuable insights into the mental health literacy of South African paramedics, particularly regarding their perceptions of psychiatric patients. By exploring the attitudes and beliefs of paramedics, the research seeks to highlight gaps in mental health education within the pre-hospital industry. Despite the study being explorative in nature, the findings have the potential to inform educational interventions tailored to enhance not only paramedics understanding and management of mental health issues but also other first aiders such as police and firefighters. This could ultimately lead to more effective care, fostering a more compassionate and informed approach to psychiatric emergencies. Furthermore, this research can serve as a foundation for future studies on mental health literacy in emergency medical services, encouraging academic scholars to delve deeper into this critical area. Overall, the study intends to improve the well-being of both paramedics and the patients that they serve.

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Annexures

Annexure A – Consent Form



Annexure H (a) – PARTICIPANT OR RESPONDENT CONSENT FORM

Explanatory information sheet and consent form for participants

To whom it may concern,

My name is Arshaad Boomgaard and I am a student at The IIE's Varsity College Sandton. I am currently conducting research under the supervision of Dr John Hunter about paramedics' perceptions and attitudes towards psychiatric patients. I hope that this research will enhance our understanding of paramedics' mental health literacy levels.

I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.

What will I be doing if I participate in your study?

I would like to invite you to participate in this research because it is important to understand the mental health literacy levels of paramedics and their attitudes towards psychiatric patients. If you decide to participate in this research, I would like to interview you for a period of 30 minutes and ask you questions revolving around your personal experiences with psychiatric patients in the prehospital industry.

You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular interview questions.

Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your work experiences with psychiatric patients as a way of leading to interventions in paramedics' educational programs. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.

To the best of the researcher's knowledge, there are no psychological or physical risks that are present in this study.

Do I have to participate in the study?

- Your inclusion in this study is completely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;

- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at Varsity College Sandton, will have access to your interview information. I would like to use quotes when I discuss the findings of the research, but I will not use any recognisable information in these quotes that can be linked to you.

What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my Bachelor of Arts Honours in Psychology. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.

My contact details are as follows:

Arshaad Boomgaard

Telephone Number [REDACTED]
[REDACTED]

The contact details of my supervisor are as follows:

Dr John Hunter
[REDACTED]

Participant or respondent consent

I, _____, agree to participate in the research conducted by Arshaad Boomgaard about exploring paramedics' attitudes and perceptions of psychiatric patients.

This research has been explained to me and I understand what participation in this research will involve. I understand that:

- I agree to be interviewed for this research.
- My confidentiality will be ensured. My name and personal details will be kept private.
- My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research.
- I may choose not to answer any of the questions that are asked during the research interview.
- I may be quoted directly when the research is published, but my identity will be protected.

Signature	Date



ANNEXURE H (b) - AUDIO OR VIDEO RECORDING CONSENT FORM

Consent form for participants

I, _____, agree to allow Arshaad Boomgaard to audio record my interviews as part of the research about exploring paramedics' attitudes and perceptions of psychiatric patients.

This research has been explained to me and I understand what participation in this research will involve. I understand that:

- My confidentiality will be ensured. My name, personal details or any other identifiable information will be kept confidential;
- The recordings will be stored in a password-protected file on the researcher's computer; and
- Only the researcher, the researcher's supervisor(s) and possibly a transcriber (who will sign a confidentiality agreement) will have access to these recordings.

Signature	Date

Annexure B – Interview Schedule/Questionnaire

Hello, my name is Arshaad Boomgaard. I am conducting this interview as part of my research. This research is a requirement for my Bachelor of Honours Degree. Thank you for taking the time to answer some of my questions. This interview's aims to gather information regarding paramedics' perceptions and attitudes towards psychiatric patients. The information that you will provide, will give me an insight into paramedics' mental health literacy levels. I must remind you that this interview is completely voluntary, and you are welcome to end your participation anytime should you wish to. This interview will be recorded and as in the information sheet, I just want to assure you that any information that you share is completely confidential and only will be only accessible to my supervisor and me. In order to ensure your confidentiality, on the audio recording a pseudonym will be used to refer to you. This is a safe and non-judgmental environment, so I ask that you be truthful in your responses. There is no right or wrong answer, you may refrain from answering any question if you feel like it. The questions are designed to get your personal experiences in the industry. Before we begin can you please sign the consent forms? The interview should last around 30 min + or -. Once again thank you for doing this interview, do you have any questions before we start?

Questions

1. Do you work full-time as a paramedic?
2. What is your level of training?
3. At which educational institute did you receive your training?
4. What are your thoughts on the current training provided to paramedics regarding psychiatric emergencies?
5. Can you describe your experiences encountering psychiatric patients during emergency calls?
6. Could you share an experience where you felt well-prepared to assist a psychiatric patient?

7. In your opinion, what factors contribute to effective communication with psychiatric patients?
8. How do you navigate situations where a psychiatric patient refuses medical assistance?
9. What challenges do you face in providing medical care to psychiatric patients?
10. How do you manage your emotional reactions when dealing with psychiatric patients?
11. Can you discuss any stigmatizing attitudes or behaviours you have observed toward psychiatric patients among the paramedic's communities?
12. How do think the attitudes of paramedics towards psychiatric patients impact the medical care provided?
13. What resources do you think are necessary to improve paramedics' response to psychiatric patients?
14. Have you encountered a situation where cultural or social factors influenced the care towards psychiatric patients? If so, how did you handle it?
15. Can you describe a challenging encounter with a psychiatric patient and how did you handle it?
16. How do think paramedic attitudes towards psychiatric patients can be improved or altered?
17. Can you discuss any ethical dilemmas that you have faced when dealing with a psychiatric patient?
18. What strategies do you use to de-escalate a tense situation with psychiatric patients?
19. What types of psychiatric patients do you encounter?
20. Is there anything that you would like to add or share about your experiences working with psychiatric patients in the pre-hospital industry?

Annexure C – Ethical Clearance Letter





19 July 2024







Student name: Arshad Boomgaard
Student number: ST10090302
Brand and campus: Varsity College Sandton
Title of Research Project: Exploring paramedics' and first aid responders' mental health literacy and attitudes towards psychiatric patients: A cross-sectional qualitative study on South African paramedics, using semi-structured interviews.

Approval of the Bachelor of Arts Honours in Psychology Proposal and Ethics Clearance

Your research proposal and the ethical implications of your proposed research topic were reviewed by the campus ethics committee, a subcommittee of The Independent Institute of Education's Ethics Committee.

Your research proposal posed no significant ethical concerns, and we hereby provide you with ethics clearance to proceed with your data collection. Changes recommended by the Campus Ethics Committee will be communicated to you and your supervisor in writing.

The following conditions are the standard requirements attached to the approval of all applications to conduct research involving human participants:

- Approval will be for a period of one (1) year, starting from the date of approval.
- You should notify the IIE Campus Ethics Committee regarding any alteration to the approved research project, such as but not limited to the title, problem statement, research objectives, methodology, and instrument.
- You should notify the IIE Campus Ethics Committee in the event of any adverse effects on participants or of any unforeseen development that might compromise the ethical integrity of your research project.
- The researcher(s) will need to obtain informed consent in writing from the participants/ respondents in their sample if the study is not anonymous.
- A copy of this letter must be forwarded to the relevant person(s) at the organisations/ institution that would be involved in this research study.
- You are required to uphold the IIE's Ethics stance as described in the Research and Postgraduate Studies Policy (IE007). The policy is available on the institutional website.

We wish you all the best with your research!

Yours sincerely,



Dr John Hunter
Supervisor



Pat Scalone
Chair of the Campus Ethics Committee

ADvTECH House: Iwanda Greens, 54 Iwanda Rd West, Wanda Valley 2146
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Final Audit Report

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