The feasibility of task-shifting Prolonged Exposure for Primary Care (PE-PC) for PTSD within a low resource community in the Eastern Cape.

by

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Abstract

Although high levels of trauma exposure potentiate an alarming prevalence of PTSD, increasing the need for trauma-focused treatment, the South African health system is unable to care for the population. The South African healthcare system contains a range of systemic and structural inefficiencies, including suboptimal care and shortages of healthcare professionals. PE-PC offers a resource-constrained mental healthcare system solution by integrating an evidence-based intervention (EBI) in primary care settings. Likewise, the present study acknowledges the ratio of mental healthcare professionals to patients in low- and middle-income countries (LMIC). It explores task shifting to expand mental healthcare to primary care settings.

The study follows qualitative healthcare design research to explore the experiences and perceptions of the two cohorts of trauma support workers (TSW) from Rhode University and the Joza community in Makhanda. The feasibility of the PE-PC intervention in Makhanda was illustrated through the data obtained from the TSWs' experiences and perceptions of the intervention's utility. The present study presents an essential contribution to the sparse research conducted on treating PTSD in LMIC with shortages in healthcare professionals.

The thematic findings look at the trauma support workers (TSWs) role, including some of its challenges, to explore the feasibility of interventions. Some of the themes highlighted unpack the perceived utility of task-shifting in low-resource contexts, the limitations thereof and considerations for future research. Notwithstanding the challenges, the data from the present study indicates that PE-PC can be feasibly task-shifted in low-resource contexts such as Makhanda.

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Firstly I want to dedicate this body of work to my grandparents, Thandi and John Mojela.
In layman's terms I am truly their wildest dream.
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Thank you for the gentle reminders of my capabilities and the constant encouragement to work a little harder. Thank you for being there to listen to my many ideas even when they seemed incoherent.

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This project reassured me that a flower can indeed bloom beneath the concrete…
1 Corinthians 16: 13-14

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Chapter 1

Introduction

Overview of study

Posttraumatic stress disorder (PTSD) is considered a global mental health concern that has far-reaching public health consequences (Koenen et al., 2017). Granted that natural recovery is possible for the majority of the population, there is a smaller group who do not. With the high prevalence of violence and trauma in South Africa, there is an urgent need to improve access to effective treatments for PTSD. Factors such as ongoing adversity, poverty, etc., moderate the pathogenic impact of the traumatic stressor, placing socioeconomically disadvantaged individuals such as those in LMIC at a heightened risk of developing PTSD (McNally, 2018).

SA's mental health has worsened due to COVID, yet there are not enough affordable healthcare solutions to help those in need. According to the South African Society of Psychiatrists (SASOP), mental healthcare in SA continues to be allocated less than 10% of the national public health budget (Docrat et al., 2019). In addition to the fact that much of the mental healthcare system focuses on more severe mental conditions. The reality of mental healthcare in SA calls for the expansion of treatment options beyond the scope of specialised mental healthcare and into primary healthcare.

Over the last few decades, several trauma-focused therapies have accrued evidence to support the efficacy and effectiveness of prolonged exposure therapy (PE) in treating symptoms of PTSD (Hamblen et al., 2019). PE therapy was first developed in speciality care to reduce PTSD and related symptoms (Rauch et al., 2017). The central focus of PE is to enable trauma survivors to confront the memory associated with the traumatic experience through imaginal and in vivo exposure. Existing literature argues for a need to investigate the effectiveness of PE within ongoing adversity (See Kaysen et al., 2015; Murray et al., 2015; McInnis & Merajver, 2011; Rossouw et al., 2018).

To address a chronically overburdened public mental health system, the World Health Organization (WHO) recommends integrating mental healthcare into already existing healthcare packages within primary care, such as prolonged exposure to primary care (PE-PC) (Spedding et al., 2015; Chibanda, 2017). PE-PC was developed as a brief protocol of the standard PE to be implemented in settings where most patients are mainly present for primary care (Rauch et al., 2017). However, due to the severe shortage and imbalanced distribution of trained mental healthcare workers, access to mental health services remains low (Agyapong et al., 2015; Booysen & Kagee, 2020).

Together with integrating mental health into primary care, task-shifting is a radical approach to address unmet needs within the healthcare system in low-resourced contexts. Task-shifting, as the redistribution of tasks from highly qualified healthcare workers to minimally trained workers, is intended to alleviate the overburdened public mental healthcare system (Javadi et al., 2017). Therefore, investigating the feasibility of task-shifting PE-PC in low-resource communities is a priority as it addresses many barriers within public mental healthcare. In determining the feasibility of this approach, this research project will document the system-wide impact of the intervention.

Key Research Questions

1. What are the facilitators and barriers to implementing PE-PC in a low-resource community?
2. How do trauma support workers perceive the utility of PE-PC for the treatment of PTSD in low-resource communities?
3. How do trauma support workers experience implementing PE-PC, an exposure therapy, for the treatment of PTSD in a low-resource community?

Thesis Outline

Chapter 1 introduces the study and briefly discusses the problem statement and rationale for conducting the study. This chapter contains the research questions that the study will be answering.

Chapter 2 consists of the literature review. This chapter unpacks posttraumatic stress disorder (PTSD), including the diagnostic criteria and the global and local prevalence. It continues to PTSD treatment, focusing on cognitive behavioural therapy (CBT), emotional

processing theory, prolonged exposure therapy (PE) and prolonged exposure for primary care (PE-PC). The last section explores the implementation of PE-PC, which looks at the contextual considerations and task shifting as an approach. This chapter lays the foundation for the rest of the research paper, introducing some central components explored through the study.

Chapter 3 contains the theoretical framework employed in the research study, focusing on implementation science and diffusion theory.

Chapter 4 describes the methods employed in the study in light of the research design, questions, context, and sample. It further discusses the data collection and analysis process.

Chapter 5 presents the textual data obtained during the semi-structured interviews discussed in *Chapter 6.*

Chapter 7 is the limitations and conclusions chapter.

Chapter Summary

The chapter above is an introductory chapter delineating the structure of the various chapters and providing a foreshadowing of the contents of the research project.

Chapter 2

Literature Review

Chapter overview

The main component of this chapter is to systematically review literature concerning the development of post-traumatic stress disorder (PTSD), along with relevant empirical literature relating to its treatment and intervention implementation. This literature review summarises primary research on the subtopics that comprise the research question. A structured and methodical process was followed to ensure that the paucity of research and literature in low- and middle-income countries (LMIC) was accounted for.

Academic databases such as Google Scholar, Science Direct, Taylor and Francis, Research Gate and PsycINFO via EBSCOhost, to name a few, were used as the primary search engines. Because the field of PTSD is constantly evolving, the focal period was between 2018 and 2023 to ensure that the information gathered is still relevant in the current period. However, for conceptualisation purposes, leniency was placed on relevant articles even though they were published in years outside the primary inclusion criteria.

The chapter begins by discussing PTSD, with a clear definition and criteria for diagnosis according to the Diagnostic and Statistical Manual of Mental Disorders (DSM), because the intervention uses the PTSD Checklist for DSM-5. Following this, the prevalence rates associated with trauma and PTSD are explored, both globally and locally, within the South African population. The exploration of the prevalence rates introduces the concept of a trauma registry, which is suggested to combat the lack of a national trauma database.

This chapter continues to explore the foundations and theories for PTSD treatment options, with a focus on cognitive behavioural therapy (CBT). An evidence-based therapy called prolonged exposure therapy is discussed, with its protocol and theoretical underpinnings outlined. In addition, a brief version of the treatment option is considered for implementation.

As a result of barriers and limitations to mental healthcare in the South African health system, an alternative to implementing an intervention for PTSD treatment is investigated.

Task-shifting implications are explored within the restraints of the health system in the context of the study's implementation.

The chapter ends with the theoretical foundation for the methods used to research the task-shifting of PE-PC in a low-resource context. The chapter unpacks diffusion theory drawn from implementation science and argues for its relevance in this research study.

2.1 Post-traumatic stress disorder

Although the nervous system has developed a range of cognitive appraisals to deal with the constant distress from everyday life, some events and experiences result in maladaptive responses and behaviours. PTSD is an example of the maladaptive responses and behaviours associated with traumatic experiences. A *traumatic experience* is defined as a catastrophic incident or series of incidents that pose an uncontrollable and unpredictable threat to the livelihood of oneself or others (Center for Substance Abuse Treatment, 2014; Edwards, 2005; Mclean & Foa, 2011). The unusualness and violent nature of PTSD-inducing traumatic events or experiences result in feelings of hopelessness and vulnerability that counteract the individual's natural recovery (Nortjie, 2018).

Traumatic events are common in the human experience; however, the reactions and responses exist on a spectrum of severity (Edwards, 2005). On the one end of the spectrum are individuals who experience distressing symptoms temporarily following the traumatic event, which are classified as normal responses. Wherein the other end of the spectrum consists of individuals who experience a persistent and pathological response to the traumatic event, suggesting a PTSD diagnosis (Bryant-Davis, 2019; Edwards, 2005; Stein, Seedat et al., 2007). The persistent nature of these symptoms provides an explanatory basis for the extensive functional impairment resulting from PTSD.

After this traumatic experience, the individual's mental and emotional state should return to a state of homeostasis for emotional processing to occur (Foa et al., 2006). However, in PTSD, emotional processing does not occur successfully, impeding natural recovery. The inability to return to homeostasis highlights a fundamental problem of an individual's hyper-fixation of the experienced traumatic event or the trauma memory (Kaminer & Eagle, 2010). The overwhelming stressor experienced by the individual imprints a memory of the trauma that

becomes the central organising principle in the individual's life (van der Kolk, 2014). This reorganisation of cognitive associations results in a significant disintegration of the individual's coping mechanism and ability to access protective resources that aid recovery (Nortjie, 2018).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-III; American Psychiatric Association, 1980), PTSD was formally introduced as a rare response to severe stressors or events outside the accustomed human experience. PTSD is a psychiatric disorder that emerged from a complex chain of traumatic events, resulting in a disordered mental and behavioural state (Edwards, 2005; Keane & Barlow, 2002; Keane et al., 2008). It was established amidst the omnipresent fear of the First World War as a new syndrome defined by a range of physiological, cognitive, and emotional symptoms previously called shell shock (Andreasen, 2022; Kaminer & Eagle, 2010).

Subsequent revisions within PTSD research have steadily adapted and broadened the definition and diagnostic criteria to expand on the insufficient knowledge and information (Bryant-Davis, 2019; Miao et al., 2014). Nevertheless, the definition and conceptualisation of PTSD remain complex and, to an extent, open to debate (Bryant-Davis, 2019; Morina et al., 2014; Ryder et al., 2018). Its complexity may be attributed to PTSD's intricate aetiology and manifestation of symptoms, which may sometimes overlap with other mental conditions (Miao et al., 2018). In turn, this has urged continuous comprehensive research covering all psychological and behavioural maladaptive changes associated with PTSD (Geier et al., 2018).

Some possible limitations and discrepancies continue to exist within PTSD research (Miao et al., 2018). For example, the idea that PTSD requires a single focal event for much of its development has been contested because it does not reflect the reality of trauma in most of the world (Hobfoll et al., 2018). Likewise, insomuch as PTSD is a universally understood phenomenon, accepted models do not account for the culture-bound variations of expressions and responses to trauma-related stress (Hobfoll et al., 2018; Miao et al., 2018). As such, it is essential to note that because the situations that cause post-trauma symptoms vary dramatically from person to person, PTSD is a subjective syndrome, defined by the response more than the trigger (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014).

2.1.1 Diagnostic criteria

The diagnostic requirement for PTSD consists of 20 symptoms categorised into four clusters that involve fear, horror, and helplessness. A PTSD diagnosis requires the onset of these symptoms to be present for more than a month following exposure to an extreme or traumatic event prior to formal consideration (APA, 2013). Criterion A refers to exposure to the traumatic event both directly or indirectly through witnessing in person threatened or actual death or severe injury (APA, 2013). Because most individuals typically have a variety of responses to traumatic events and experiences, individuals must experience symptoms persistently to avoid the risk of pathologizing normal psychological responses (Bryant, 2019; Morina et al., 2014).

Cluster B in the diagnostic criteria describes intrusive symptoms associated with the traumatic event. Intrusive symptoms include recurrent and distressing memories, dreams and flashbacks related to the traumatic event (APA, 2013; Miao et al., 2018). Cluster B also includes intense psychological and physiological distress due to internal or external triggers relating to the traumatic experience. Dissociation is a typical reaction to intrusive thoughts and memories, which results in a struggle to adapt to their routine because of the constant interference of re-experiencing or reliving their traumatic memory (Foa et al., 2006). Cluster B also includes avoidance of all stimuli associated with the traumatic event, such as people, places, and things (Bryant & Keane, 2013).

Furthermore, cluster C refers to the persistent and active avoidance of internal (e.g., thoughts, memories) or external (conversations, places) reminders of the traumatic event (Bryant, 2019). It is characterised by extensive efforts to avoid reminders of the traumatic event that arouse distressing feelings. Most traumatised individuals avoid any distressing reminders associated with the traumatic event or experience (Center for Substance Abuse Treatment, 2014). Avoidance is a widely recognised PTSD trait and the engine that drives PTSD and its symptoms, which leads to impaired functionality (Possemato, 2011). Some consequences of these avoidance tendencies are the overall impairment of the individual's life due to their withdrawal from some relationships, activities, and routines, which evoke unpleasant emotions concerning the traumatic event (Bryant & Keane, 2013).

In addition to an inability to remember the traumatic event, the individual must present with at least two symptoms in cluster D. The inability to remember the traumatic event and general forgetfulness highlights one of the ways overwhelming and traumatising stress often results in abnormalities in memory processing (Perry & Winfrey, 2022; Radulovic et al., 2018). Cluster D includes symptoms associated with adverse changes in cognition and mood, which began after the traumatic event (Center for Substance Abuse Treatment, 2014). Some of the symptoms in this cluster include a persistent and exaggerated negative emotional state accompanied by similar thoughts, leading to an inability to experience positive emotions (Center for Substance Abuse Treatment, 2014).

Symptoms classified under cluster C are due to arousal and stress response alterations. These symptoms include irritability, typically expressed through verbal or physical aggression, sleep and concentration disturbances, and reckless behaviour, such as substance use (Bryant, 2019). Alterations in the normal functioning of individuals with PTSD have long been acknowledged, with significance placed on the intensity and longevity of the symptomatology (Stevens & Jovanovic, 2019). Allostatic load provides a conceptual framework demonstrating how the continuous strain on the body due to stress can alter the individual's physiological and metabolic activity, hence the constant flight or fight state of mind (Ryder et al., 2018).

Individuals often experience dissociative symptoms, which might aggravate their decreased interest in regular activities (Bryant, 2019; Center for Substance Abuse Treatment, 2014; Morina et al., 2014). These symptoms may include depersonalisation symptoms relating to detachment from one's body or derealisation symptoms, which are an experience of unreality (Center for Substance Abuse Treatment, 2014). Due to the general withdrawal from their present life, individuals with PTSD cannot experience joyful and exciting moments as they are constantly fixated on estimating the probability of another threatening event (Foa et al., 2006). This exaggerated anticipation of harm is a justifiable attempt from the individual to prevent or escape another life-threatening situation.

The diagnosis requirement for PTSD can be summarised as an exposure to a distressing experience followed by a minimum of one intrusion symptom, one avoidance symptom, two symptoms relating to negative alterations in cognition and mood, and two symptoms relating to arousal and reactivity (APA, 2013; Center for Substance Abuse Treatment, 2014). Exposure to a stressor alone is insufficient for most individuals; symptoms should be accompanied by

significant functional impairment, and PTSD screening should occur (Geier et al., 2018). Self-report questionnaires are typically used to measure an individual's PTSD severity and assess symptoms.

Lastly, growing evidence has suggested several treatment guidelines that provide varying degrees of improvement, including symptom reduction for individuals with PTSD (Miao et al., 2018; McLean & Foa, 2014). Evidence-based guidelines for diagnosis and treatment have been proven valuable in developing treatment plans for providers working with PTSD patients (Martin et al., 2021). Reviews on these guidelines indicate strong effectiveness in treating PTSD on a long-term basis and highlight CBT as a first-line psychological treatment (Martin et al., 2021).

2.1.2 Prevalence of PTSD

Much of the early trauma work in South Africa originates in political interest because of apartheid, which was characterised by constitutional racial segregation, exploitation and political violence (Booysen & Kagee, 2020; Swain et al., 2017). Although the transition to democracy was achieved, high criminal and interpersonal violence levels have continued within the country, resulting in high trauma exposure (Atwoli et al., 2013). Several reports on South African communities linked direct or indirect exposure to violence with pathological health outcomes in children and adults (Peltzer, 1999; Seedat et al., 2004; Swain et al., 2017). These high levels of trauma exposure have resulted in the population being at risk for trauma-related mental conditions, such as PTSD.

South Africa is defined as a developing country with alarmingly high levels of interpersonal violence and crime, with news of violent crimes frequently making headlines. Although trauma is an epidemic in the country, the government has yet to take the initiative to create a fast and effective trauma registry database (Bhana et al., 2022). A trauma registry is a disease-specific collection consisting of files of uniform data elements that describe the 'injury event, demographics, pre-hospital information, diagnosis, care, outcomes, and costs of treatment for injured patients' (Bommakanti et al., 2018, p.73)'. The lack of a trauma registry has resulted in the inadequate identification of PTSD, leading to shortcomings within trauma care and systems (Booysen & Kagee, 2022; Sulliman et al., 2005).

In addition to methodological discrepancies, several limitations, including the scarcity of literature and research in LMIC, have hindered the ability of researchers to quantify the prevalence of PTSD in the context of ongoing trauma (Hoffman et al., 2011). Despite the acknowledged fact that most of the population is dealing with multiple continuous traumatic experiences, the lifetime prevalence of PTSD in the South African general population remains unclear (Greene et al., 2018). Regrettably, the lack of a trauma database invalidates the suggested data, as the existing data could be outdated (Bhana et al., 2022). Outdated PTSD prevalence data fails to paint an appropriate picture of the rates and patterns of trauma exposure in South Africa.

According to Kaminer and Eagle (2010), South Africa has doubtlessly been recognised as a dangerous place, which translates into a large number of the population having experienced a traumatic event. Several studies indicate an estimated PTSD lifetime of 2.3% and a 12-month prevalence of 0.7%, respectively, with a conditional PTSD prevalence of 3.5% within the South African population (Swain et al., 2017). Similarly, PTSD was investigated in a predominantly Xhosa urban primary care clinic in South Africa, and 19.9% of the participating sample met the criteria for diagnosis (Carey et al., 2003; Greene et al., 2016). Available data does not accurately present a comparison between trauma exposure rates and PTSD prevalence because unreported exposure is far higher than the data suggests (Kaminer & Eagle, 2010; Seedat et al., 2004). As a result, interpretation of the data should be observed with reservation.

Comparatively, the World Mental Health Surveys have found an estimated global lifetime prevalence of 6,8% in adults, with an annual prevalence of 3,5%, where the lifetime prevalence rate for women is 13-20% compared to the 6-8% for men (Bryant, 2019; Spottswood et al., 2017). Epidemiological studies globally have revealed a higher PTSD prevalence in high-income countries compared to LMICs. However, it is advised to consider how factors such as differences in access to health resources, comorbidity, and the paucity of research may account for insufficient data in LMIC, leading to unreliable prevalence percentages (Bryant, 2019). Some of the gaps and difficulties in accurately assessing local prevalence data have been noted in comparison to international literature (Kaminer & Eagle, 2010).

Exploring the plethora of potentially traumatic events (PTE) associated with living in adverse contexts, trauma has been documented as a significant risk factor for developing

mental illness (Harrison et al., 2021). To identify these PTEs and their cumulative trauma burden, the self-report Life Events Checklist for DSM-5 (LEC-5) has been used in numerous studies, including one conducted by the South African Stress and Health (SASH) (Kaminer & Eagle, 2010; Martin et al., 2021;). Regrettably, country-specific traumatic events might not be captured by the current LEC-5 (Stevenson et al., 2023). Similarly, reliable prevalence statistics are difficult to establish for a number of reasons, including certain types of trauma, such as gender-based violence (GBV) being underreported (Kaminer & Eagle, 2010).

Lastly, there is a lack of comparative data on the prevalence and effects of exposure to violence in the South African population (Seedat et al., 2004). With high prevalence rates of crime and ongoing adversity, South Africa urgently needs a trauma registry, which will provide a comprehensive description to aid in developing trauma treatment and care (Bommakanti et al., 2018). Understanding the country's prevalence of different forms of trauma indicates the first step to developing strategies for creating efficient trauma care (Kaminer, 2010). Because trauma takes place against the backdrop of constraints in trauma intervention accessibility and availability, the population has been further disproportionated.

2.2 Treating PTSD

When left untreated, PTSD symptoms may persist for years, resulting in severe psychological and physical problems. The implication of untreated PTSD is not only direct but also indirect in the financial and emotional burden caused to the individual and family. For example, it is not uncommon for untreated PTSD to result in the use or abuse of alcohol and drugs to cope with the intense symptoms. Notably, untreated individuals and their families become subject to considerable care costs (Gagnon-Sanschagrin et al., 2022).

Furthermore, the invisibility of PTSD to the larger world isolates those suffering from it and impacts their quality of life. Many cases of untreated PTSD commonly result in increased risky behaviour, inability to develop or maintain interpersonal relations and significant psychiatric and physical comorbidities (McLean et al., 2022). The burden of undiagnosed and untreated PTSD highlights the need for increased awareness and finding innovative and cost-effective treatment options.

The following section introduces treatment guidelines used to develop a trauma-focused treatment plan. The section further discusses cognitive behavioural therapy as a trauma-focused treatment option used in this study. It prefixes the conceptualisation of PTSD treatments with prolonged exposure therapy (PE) and prolonged exposure therapy for primary care (PE-PE) by unpacking emotional processing theory.

2.2.1 Treatment Guidelines

To date, numerous organisations, including the American Psychiatric Association, International Society for Traumatic Stress Studies (ISTSS), and the World Health Organization (WHO), to name a few, have reviewed a variety of PTSD treatment approaches to develop guidelines for clinicians and practitioners (APA, 2017). Guidelines illustrate a systematic approach to translating research evidence into clear statements that aid healthcare clinicians and providers in decision-making and the development of a treatment plan (Hamblen et al., 2029). The goal of the selected treatment option is to ameliorate the severity of the chronic PTSD symptoms in order to aid in daily functioning (Hembree et al., 2003).

According to Martin et al. (2021), some guidelines strongly recommend psychological therapies as the preferred first step in treatment, with pharmacotherapy as the next-line treatment. For adults with PTSD, these guidelines suggest that clinicians offer cognitive behavioural therapy (CBT), including prolonged exposure (PE) with cognitive restructuring because of its ability to deal directly with traumatic memories (APA, 2017). As a second-line treatment, some of the pharmacotherapy options recommended by guidelines include sertraline, atypical antipsychotics and selective serotonin reuptake inhibitors (SSRI) (Hamblen et al., 2019; Martin et al., 2021).

While a number of treatment guidelines are being produced worldwide, there are also barriers to implementing guidelines within practice. Some barriers include the need for more time to review these lengthy guidelines to make decisions during practice and the oversupply of guidelines that may often contain conflicting recommendations (Card, 2023). Another barrier preventing clinicians from implementing these guidelines is the perceived rigidity created by the recommendations (APA, 2017; Martin et al., 2021). Importantly, variations in practice will inevitably occur when providers consider the role of socio-economic, cultural and contextual issues that are unique to each institution (APA, 2017).

Likewise, the ISTSS guidelines also acknowledge practical considerations such as the availability and accessibility of those recommended trauma-focused interventions and patient preference (APA, 2017; Martin et al., 2021). Patient preference may also include their response to the provided treatment option, especially in cases of significant comorbidities. Consistent with other PTSD treatment guidelines, more research trials are needed to determine whether combining psychotherapy and pharmacotherapy is an efficacious option for treating specific comorbid PTSD symptoms. As such, it is recommended that future research conduct relevant treatment comparisons (i.e., comparative effectiveness trials) within diverse sample groups (i.e., inclusion of participants with comorbid disorders and coexisting conditions) (APA, 2017; Card, 2023).

Notably, while research findings establish the guidelines for 'evidence-based recommendations', clinical judgment is paramount for practical treatment application in practice (APA, 2017). Providers are urged to familiarise themselves with existing treatment options, including their efficacy and contextual applicability, when creating treatment plans for patients with PTSD to minimise dropout.

2.2.2 Cognitive Behavioural Therapy

There are several psychological treatments for PTSD, including trauma-focused and non-trauma-focused interventions. What distinguishes these two interventions is that trauma-focused interventions aim to directly address the memories, thoughts and feelings related to the traumatic event (Martin et al., 2021). Examples of trauma-focused interventions include Prolonged Exposure (PE), Cognitive Processing Therapy (CPT) and Cognitive Behavioural Therapy (CBT). On the contrary, non-trauma-focused interventions only focus on reducing the symptoms related to PTSD. Non-trauma-focused interventions include relaxation techniques to help with stress and anxiety. This section describes CBT as a trauma-focused intervention for the treatment of PTSD.

Due to a recognised global necessity, there has since been a renewed interest in the treatment approaches for trauma and a move to research-based practice to explore debates about the merits of various models of interventions (Kaminer & Eagle, 2010; Possemato,

2011). Mixed reports and critical research findings show different treatment implications due to multifaceted factors and influences (Kaminer & Eagle, 2010). In conjunction with this, treating trauma can be a delicate process due to the unpredictable consequences that may result from accessing the individual's specific traumatic memories (Rodulovic et al., 2018).

CBT is an evidence-based, popular form of psychotherapy that is effective in treating several mental health conditions, including PTSD (Weber et al., 2021). The principle behind CBT is the interconnectedness of our thoughts, feelings and behaviours learned from our past experiences. The intervention focuses on modifying negative and unhelpful thoughts to help unlearn the present behaviour patterns (Rothbaum, 2022). According to Watkins (2018), those negative appraisals tend to repeatedly recondition the trauma memories with distress, which leads to avoidant tendencies. Thus, treating PTSD through CBT can help identify how these traumatic experiences affect behaviour and aid in dealing with avoidance and fears.

Trauma-focused CBT typically involves behavioural and cognitive techniques, sometimes anxiety management (Watkins, 2018). The behavioural aspect of CBT includes exposure therapy, an intervention aimed at helping the individual confront what they are scared of safely and therapeutically. CBT uses exposure therapy through imaginal and narrative exposure, such as writing or reading the traumatic memory aloud (Weber et al., 2021). Cognitive restructuring helps the individual make sense of the traumatic memory by working through their dysfunctional thoughts to understand their reality better. Exposure to trauma-related stimuli teaches individuals to identify their triggers and practice discerning then vs now (Rodulovic et al., 2018).

Consistent with the recommended guidelines, the effectiveness of CBT has been supported by several research studies, which have also compared the different components of CBT (Baker et al., 2013; Rothbaum, 2022; Watkins, 2018). A combination of exposure therapy and cognitive restructuring was found to have the most significant effect on symptom reduction for PTSD at a six-month follow-up (Bryant, 2019). Because of the guidelines and robust research evidence, trauma-focused CBT is suggested as a first-line treatment for PTSD as it is associated with better remission rates. Although there has been concern that focusing on traumatic memory might elicit distress and increase adverse side effects, no evidence supports that claim (APA, 2017).

At its core, CBT is centred around recognising the individual's experience as an essential part of their healing instead of discounting or minimising the severity of it. CBT incorporates techniques and skills that help adjust those negative thoughts and fears on an incremental basis that can be implemented collaboratively with the provider (Miao et al., 2018). One benefit of CBT is its positive effects often lead to long-term results even after stopping treatment (Murray et al., 2022). Despite the robust evidence base for the efficacy, some drawbacks might result in treatment dropping out from some individuals involved. CBT might not be enough for individuals presenting with severe dysfunctional cognitive schemas or complex conditions, resulting in them remaining symptomatic even after treatment (Bourdon et al., 2018).

Similarly, some parts of CBT that require addressing the traumatic memories and how dysfunctional thoughts affect the individual might be uncomfortable. If the individual is not prepared for the discomfort and the temporarily heightened emotions, they may prefer opting out of the intervention (Bourdon et al., 2018). Because of this, CBT requires commitment and persistence for the individual to get the results they want; on the other hand, it results in individuals dropping out. Considering the South African context, CBT with a professional might be out of reach because of financial costs. Some therapists accept medical aids and insurance; however, because most South African population relies on public healthcare, it might only be available through speciality care.

Mental health systems globally are marked by significant gaps resulting primarily in untreated mental disorders (WHO, 2022). Even though the mental healthcare systems' shortcomings in PTSD care have been recognised, the paucity of literature fails to aid in the development of quality trauma care programs. The information gap partially reflects the country's capacity to gather, report and monitor reliable, up-to-date mental health data, including its policies and laws, workforces, and services (WHO, 2022). Proposed solutions include improving data collection methods while expanding the implementation of evidence-based treatments (Bommakanti et al., 2018).

Lastly, trauma-focused interventions such as CBT with the most robust evidence should be implemented as first-line treatment options. Future research aims to ascertain whether such interventions are as effective within culturally diverse populations and result in significant symptom reduction. Information concerning the efficacy of evidence-based interventions

should be disseminated widely to ensure that misconceptions do not prevent treatment-seeking behaviour. This will allow communities to broaden their knowledge.

2.2.3 Emotional Processing Theory

After several longitudinal studies investigating trauma reactions, researchers have observed individuals' varying abilities to recover naturally from traumatic events (Foa et al., 2006). Although a significant number will recover naturally, a substantial minority fails. According to Baker et al. (2013), incomplete processing of trauma will likely lead to several signs of emotional overactivity linked to PTSD, such as restlessness, irritability, and unpleasant intrusive thoughts, to name a few. To conceptualise PTSD and its treatment options, influence has been drawn from emotional processing theory, which argues that emotional and cognitive engagement with the traumatic memory is required for natural recovery (Foa & Kozak, 1986).

Emotional processing theory originates in Lang's (1977) analysis of fear structures for behavioural therapy. A fear structure is presented as a type of mental framework for reacting to a threat that encompasses information about a feared stimulus, the physiological and behavioural response, and the meanings of these elements (Foa & Kozak, 1986; Foa et al., 2006; Rauch & Foa, 2006). Foa and Kozak (1986) built on the concept and distinguished between normal and pathological feared structures. Typical fear structures are adaptive and contain realistic associations to the threatening stimulus, allowing the individual to escape danger and recover naturally (Rauch & Foa, 2006). In contrast, pathological feared structures are maladaptive and include excessive response elements resistant to modification (Foa et al., 2006). Importantly, pathologically feared structures do not accurately represent reality, resulting in distorted experiences.

Foa and Kozak (1986) state that emotional processing is understood as replacing pathological associations with nonpathological associations through modification. For emotional processing to occur, a fear memory must be activated through fear-related information, and new information must be integrated to modify emotional responses (Foa & Kozak, 2006). Successful emotional processing relies on the condition that the evident emotional disturbance due to threat has significantly declined to return the individual to normal routine behaviour (Rachman, 1979). From this, emotional processing theory posits that fear

structures serve as a blueprint for individuals' behaviour in threatening situations; such interpretational biases impede opportunity for processing (Baker et al., 2013). Therefore, using CBT or exposure therapy as a behavioural treatment for PTSD functions as a process of modifying the pathological fear structures to reduce the fear associated with the trauma memory.

Furthermore, exposure therapy helps individuals repeatedly confront their feared thoughts and memories safely and therapeutically (Foa & Kozak, 1986). It is an emotionally engaged process of repeated confrontation with the feared stimulus in the absence of the harm, through imaginal exposure and in vivo exposure aids in correcting the exaggerated anticipation of harm (Foa et al., 2006). Exposure accesses emotional information through sensory or somatic triggers, an essential way to modify meanings and integrate new ones (Baker et al., 2013). A decrease in the fear and trauma-related responses typically indicates habituation and emotional processing, signalling that new information has been integrated (Foa et al., 2006). This functions to disconfirm the exaggerated narrative associated with the pathological fear structures, thereby ameliorating PTSD symptoms (Rauch & Foa, 2006).

Lastly, behavioural therapies such as CBT and PE are designed to provide a safe space for systematic exposure to probe emotional processing. Although emotional processing occurs spontaneously throughout an individual's lifespan, inconsistent engagement and fear activation do not allow for successful recovery (Rachman, 1979). Creating a rationale and framework for the therapeutic process with the provider eases the process of accessing more complex structures that may pose difficulties. With this in mind, emotional processing theory plays a fundamental role in explaining how recovery occurs in PTSD and provides a justification for treatment selection.

2.2.4 Prolonged exposure therapy (PE)

Behavioural models of PTSD highlight the role of conditioning in fear acquisition, a process synonymous with the underlying mechanism in exposure therapy (McLean & Foa, 2022). Exposure therapy for PTSD is based on the principles of conditioning and shares procedural similarities with extinction and associative learning (McLean & Foa, 2011). Extinction learning takes place through the repeated confrontation of conditioned stimuli (CS)

in the absence of the traumatic event or unconditioned stimuli (US), a fundamental principle of PE (Foa & Kozak, 1986; McLean & Foa, 2011). The prolonged exposure and confrontation of CS in a safe and therapeutic space results in a reliable decrease in exaggerated harm expectancy (Foa et al., 2006).

As stated above, PE is a treatment program developed explicitly for PTSD. It targets the feared trauma memory through a systematic and gradual approach to trauma-related stimuli (Foa, 2011). PE aims to ameliorate PTSD symptoms through emotional processing and is based on EPT's conceptualisation of PTSD as a failure to adequately process trauma-related memories (Foa, 2011; Foa & Kozak, 1986; Hembre et al., 2003). Likewise, emotional processing occurs when new and accurate information is incorporated into existing fear structures, which results in a decrease in emotional responses (Foa & Kozak, 1986). It is essential to note that exposure does not result in unlearning or forgetting feared associations; it is the formation of new inhibitory information (McLean & Foa, 2011).

PE is the most investigated treatment for PTSD, and its efficacy has been widely demonstrated across a range of populations (Hembre et al., 2003; McLean & Foa, 2022). The treatment is delivered in a standard format consisting of 8 to 15 sessions, often 60 to 90 minutes (Foa, 2011; Hembre et al., 2003). Two minor components of PE include psychoeducation and having a clear rationale. The psychoeducation element of the treatment informs the individual about the nature of PTSD and the common reactions to trauma (Foa, 2011). Presenting a clear rationale to the individual links the treatment procedures to the individual's symptoms to convey an understanding of the framework (Hembre et al., 2003). A rationale is essential to ensuring the treatment plan is followed during and after therapy sessions (Baker et al., 2013).

Furthermore, without adequate treatment to confront the trauma memory and related fear, PTSD becomes a chronic illness with significant comorbidities (McLean & Foa, 2022). The model used for exposure therapy should not only promote extinction through confrontation but also eliminate avoidant tendencies (Foa, 2011). The first adequate exposure condition requires the targeted fear structures to be activated (Hembre et al., 2003). Exposure exercises should be conducted to promote emotional engagement with the trauma memory to activate the fear structures (Foa & Kozak, 1986). An essential element for the second condition is incorporating corrective information into the fear structure during the exposure exercises (Foa & Kozak, 1986).

According to Foa (2011), imaginal and in vivo exposures are designed to successfully achieve the two conditions necessary for emotional engagement and processing. Before these exposure exercises, the provider and client must determine which trauma will be the focal point of the treatment plan. If the client has multiple traumas, an 'index trauma' is selected according to the traumatic experience causing the most distress and dysfunction (McLean & Foa, 2011). The selected trauma is often associated with the symptoms re-experienced most frequently. Understanding their symptoms allows the provider to create a framework and treatment plan for the exposure exercises and creates an opportunity to review the client's common reactions during every session.

Imaginal exposure comprises a large part of the therapeutic treatment. It is introduced through repeated recounting of the memory to process and integrate the images, thoughts, and feelings represented in the fear structure (Hembre et al., 2003). Imaginal exposure typically includes narrating a detailed description of the traumatic event, followed by a discussion with the provider. This process is designed to help the individual organise their memory and regain a new perspective on themselves (Baker et al., 2013). Importantly, imaginal exposure generates habituation to the traumatic memory and fosters the distinction between engaging with the trauma memory and re-experiencing the trauma (Foa, 2011).

Furthermore, in vivo exposure refers to a real-life confrontation of the feared stimuli (McLean & Foa, 2011). In vivo exposure is often implemented in a stepwise fashion. The client and the provider create a list of feared situations in a hierarchical order of their expected distress (Foa, 2011; McLean & Foa, 2011). From there, the individual is required to confront the feared situation and deliberately expose themselves to it, beginning with moderately fear-provoking situations before moving to more challenging situations. Exposing the individual to situations that trigger the fear structure mirrors the natural recovery process and corrects harm-related beliefs (McLean & Foa, 2011). The in vivo exposure must occur for a duration long enough for learning and habituation to occur or for the individual's anxiety to decrease.

Insomuch as successful recall of the traumatic event may be highly distressing, avoidance of thoughts, memories, and trauma reminders maintains PTSD (Kaminer & Eagle, 2010). Avoidance maintains PTSD by preventing opportunities for emotional processing and disconfirming unhelpful beliefs developed during the traumatic event (McLean & Foa, 2011).

Despite controversies regarding the habituation framework of PE, it has been consistently associated with effective symptom reduction for both acute and chronic PTSD (Kaminer & Eagle, 2010; McLean et al., 2022). As such, PE helps strengthen new learning to maintain the effects of treatment relatively well over six months of follow-up.

Drawing from the abovementioned, as a manualised PTSD treatment option, PE has been empirically supported as an effective treatment for both civilians and veterans; however, its implementation in LMIC is yet to be expanded and established (Foa et al., 2018). McLean et al. (2022) argued that the effectiveness of exposure therapy across demographics and clinical characteristics had yet to be reported. However, adapting the intervention will be necessary to cater to demographic and contextual limitations. For example, there is still a need to investigate whether persons residing with marked levels of trauma exposure benefit from evidence-based treatments such as PE (Booysen & Kagee, 2020).

2.2.5 Prolonged Exposure Therapy for Primary Care (PE-PC)

According to Kaminer & Eagle (2010), beyond trauma severity and time-lapse, a significant aspect in determining treatment-seeking behaviour in South Africa is the victim's ability to access services. Factors interfering with access to care include shortages in healthcare professionals that inhibit the patient flow process and reluctance from individuals due to perceived stigma or lack of trust in mental health services (Cigrang et al., 2017). Providing comprehensive and integrated mental healthcare within settings where patients first present for primary care is a suggested solution to combat treatment accessibility (Hoeft et al., 2019; Maconick et al., 2018; Rauch et al., 2017). Without effective treatment options outside the speciality mental health setting, inaccessibility to mental health care will remain ever present (Wakida et al., 2019).

According to Hoeft et al. (2019), PTSD affects many patients in primary care, with a point prevalence ranging between 2 to 39% and an average prevalence of 12.5% across studies (Hoeft et al., 2019). Likewise, a growing body of research has begun demonstrating the strong connection between PTSD and the increased use of primary healthcare services because PTSD has been associated with high rates of somatic concerns and physical manifestations of symptoms (Greene et al., 2016; Ogbeide et al., 2021; Rauch et al., 2017). The reported higher

prevalence in primary care indicates the importance of using this setting for identifying and managing PTSD and developing and adapting trauma-focused interventions (Cigrang et al., 2017; Rauch et al., 2017).

A brief treatment protocol called Prolonged Exposure for Primary Care (PE-PC) was developed by amending the PE protocol to reach patients in primary care settings (Cigrang et al., 2017; Rauch et al., 2012). The treatment content of PE-PC was drawn from the standard PE model and condensed to deliver a lower dose of the intervention whilst including all its essential components (Sripada et al., 2022). A pilot study was conducted in military treatment facilities testing out PE-PC, which resulted in reduced PTSD symptoms and improvements maintained after 6 and 12 months (Cigrang et al., 2015; Cigrang et al., 2017). Although PE-PC maintains the critical components of PE, it is not intended to replace speciality mental health interventions but to increase access to options for the larger population (Rauch et al., 2017).

The intensive duration of the PE protocol has resulted in high dropout rates as it may be prohibitive to individuals with full-time employment and other responsibilities. On the contrary, 94% of the individuals who received PE-PC completed at least one session, and 82% completed all four weekly sessions (Cigrang et al., 2017; Sripada et al., 2022). The length of the PE-PC protocol has been briefly adapted for primary care settings with 4 to 8 sessions that are 30 minutes in duration (Cigrang et al., 2017; Rauch et al., 2017). As such, PE-PC fills the identified need for mental health services in primary care and increases reach to first-line treatment for PTSD care (Rauch et al., 2017).

The main components of the PE-PC protocol include psychoeducation, emotional processing, in vivo exposure, and narrative exposure as a modification of imaginal exposure (Sripada et al., 2022). The exposure exercises are introduced in the first treatment session and reviewed in the following sessions (Cigrang et al., 2017). Narrative exposure is conducted as homework assignments, which require the individual to write out the trauma memory in a detailed description and present tense (Cigrang et al., 2015). The individual must then engage with the written memory exercise for 30 minutes by reading it aloud in their own space and with the therapist, followed by a discussion of the emotional processing questions and reactions associated with the exposure (Sripada et al., 2022).

Furthermore, in vivo exposure involves confronting the people, places or things that are trauma reminders. This exposure exercise typically occurs outside the therapy session and is planned out collaboratively by the provider and the individual (Sripada et al., 2022). The individual must confront the trauma reminders and engage with the exposure exercise between sessions for approximately 45 minutes or until they are no longer anxious or fearful (Cigrang et al., 2025). Confronting the trauma-related stimuli and memories through narrative and in vivo exposure and discussing the emotional content with the provider results in symptom reduction because it promotes emotional engagement and processing (Rauch et al., 2012). Symptom reduction may be observed through how the individual engages with trauma reminders over time and through the scores on the Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5) (Blevins et al., 2015; Cigrang et al., 2017).

When viewed from a stepped-care perspective, PE-PC provides treatment options for individuals with mild to moderate severity symptoms within primary care (Cigrang et al., 2017). At the end of the consultation sessions, individuals with more complex trauma-related symptoms or co-occurring mental health conditions are referred to speciality mental health settings (Hoeft et al., 2019; Sripada et al., 2022). Rauch et al. (2017) state that the provision of PE-PC within a facilitated referral to speciality mental health services presents an efficient and complementary model to increase access to evidence-based treatment options. Collaborative care in primary care settings improves treatment by transforming the acute care model into an extended model that integrates psychiatric care and management (Hoeft et al., 2019).

Despite a consensus on the effectiveness and implementation of PE-PC, it is challenging to demonstrate its effectiveness and feasibility in South Africa's population, partly attributable to the paucity of literature (Maconick et al., 2018; Rauch et al., 2022). Even though there are high rates of trauma exposure associated with the development of PTSD, there is insufficient research and poor evidence (Ogbeide et al., 2021; Sripada et al., 2022). For a comprehensive understanding and application of the existing trauma research, one needs to consider the multidimensional layers that influence the dissemination of interventions in the LMIC context, such as South Africa (Booysen & Kagee, 2020).

Although empirical evidence supports several treatment programs, not all efficacious programs are suited for widespread dissemination (McLean & Foa, 2013). Existing literature encourages the need to explore ways to provide psychological support to individuals and

communities where violence and adversity are ongoing circumstances (Kaminer et al., 2018). For illustrative purposes, Booysen and Kagee (2021) argue that implementing PE-PC in more culturally specific and contextually synonymous settings would be valuable for assessing its effectiveness and feasibility in South Africa.

Lastly, notwithstanding the notable complexities and challenges, the continued exploration of trauma-focused therapies, such as PE-PC, is encouraged to ascertain its empirical evidence (Cassidy & Paintain, 2018). As we navigate the future of PTSD treatment, preliminary effectiveness research is pivotal to investigate whether persons who reside in settings of marked levels of adversity would benefit from receiving treatment for PTSD (Booysen & Kagee, 2020; Foa, 2011). Future research should include a substantial evaluation of the implementation of brief interventions in LMICs to contribute to addressing the gaps in the knowledge base (Docrat et al., 2019)

2.3 Implementing PE-PC

2.3.1 Dissemination considerations in LMIC

According to Javadi et al. (2017), mental health service delivery is context-specific, which means it has culturally defined interpretations of stigma, trust and definitions of mental health that will affect its uptake, impact, and success. This ties into the critique that task-shifting programmes tend to be conducted vertically, paying insufficient attention to the complexities within health systems that will limit the programme's success (Mijovic et al., 2016). Conditions such as the availability of resources and tools, regular supervision, quality training and mental health literacy affect the programme's overall feasibility. Given the reality of these complexities, the reduction in quality of care is the risk of not serving the health system conditions (Mijovic et al., 2016).

At the heart of mental health reform is an emphasis on the need for a community-based mental health system that ensures that all people have access to a range of services and supports, from promotion and prevention to treatment and rehabilitation (WHO, 2022). Along with this, task-shifting interventions create a space for the community itself to play a role in reducing the treatment gap and improving health and social outcomes by developing individual skills and competencies (WHO, 2022). The reality and practicality of upscaling mental health

services through task shifting in community-based systems is the collaboration of multisectoral networks that are contextually influenced (Galvin & Byansi, 2020).

Making structural changes for mental healthcare, such as task-shifting interventions, fosters reshaping healthcare policies because it highlights the human right to equal and effective healthcare (Castillo et al., 2019). Beyond mitigating service disruptions caused by insufficient resources, task shifting creates protective factors to support the community from variable vulnerabilities. It is, therefore, essential to understand how task shifting affects the patients and health workers, the health system, and the communities at large.

Above and beyond the implementation of an intervention, task-shifting programmes provide unique avenues to contextually adapt interventions into more acceptable and less stigmatising settings to attract more individuals (Galvin & Byansi, 2020). As stated by Kohrt et al. (2018), community-facilitated services have the potential to play a crucial role in promoting mental health awareness, reducing stigma and discrimination, and supporting social inclusion. Some components of the service delivery allow for the incorporation of programs that focus on raising mental health awareness and promotion, reducing stigma and increasing mental health literacy (Kohrt et al., 2018).

Coined by Jorm et al. (1997), mental health literacy is defined by the knowledge and beliefs about mental health that enable their recognition, management and prevention (Jorm, 2019). Typical conceptualisations and widespread beliefs among local South Africans are likely to result in the inadequate understanding and mislabelling of mental health-related issues, with the possibility of misinterpretation (Matsoane, 2012). Consequently, low mental health literacy will likely undermine the value placed on mental health and effective care due to a lack of knowledge (WHO, 2022).

Because mental health literacy refers to the public's knowledge and recognition of mental disorders, it is fair to assume that poor literacy will negatively influence the public's decision-making about their mental health; as such, the intervention's feasibility (Furnham & Swami, 2018). With the exception of anti-stigma campaigns, improving the quality of care and increasing mental health literacy potentiates the reduction of stigma and discrimination and provides an opportunity to increase mental health literacy levels (Tay et al., 2018). Taking into consideration the public's lack of mental health literacy, mental health professionals and

researchers must be in tune with how mental health is conceptualised in different communities (Ratnayake & Hyde, 2019).

Furthermore, investment and transformation in mental healthcare are needed to address the inequalities and insufficiencies in providing mental healthcare for all; however, future research should pay more attention to the long-term cost and benefits of sustaining such interventions (Hoeft et al., 2019). Ongoing efforts to respond to the treatment gap faced by mental health services in LMICs have led to the adaptation of task-shifting methodologies from high-income countries that may fail to address the social determinants that influence mental healthcare inaccessibility (Burgees et al., 2020). In recognising that task shifting is a system-wide intervention with far-reaching implications, it is vital to expand the policy and research agenda to cater to social determinants that impact the feasibility of the recommended reforms within the given context.

As task shifting is a viable solution to insufficient healthcare professionals, providers' mental healthcare and well-being are equally important to ensure functionality. Much of the existing literature focuses on the patient outcomes and responses to the implemented interventions, with little to no attention to the mental healthcare providers. The WHO Mental Health Report (2022) argued that transforming mental healthcare into a well-functioning system requires a competent and motivated workforce.

Lastly, progress has been made based on the recommendations; however, mental health systems and services remain ill-equipped (WHO, 2022). Granted, task shifting is a feasible intervention, but further contextual exploration and research are required to create updated models and frameworks for its future implementation. Changes in multi-layered systems for healthcare only sometimes result in improvement due to mis-implementation being a common occurrence. Therefore, the people and systems involved need to remain adaptive and responsive.

2.3.2 Task shifting

In the wake of high levels of trauma and ongoing adversity, 90% of the South African population with mental health issues remain without medical care, even though there are

effective treatment options (Ogbeide et al., 2021; Sibeko et al., 2018). Despite the call for the global prioritisation of mental healthcare, most of the population is disadvantaged either by the inaccessibility of services or inadequate aid from those existing services (Memon et al., 2016). Consequently, it is imperative to understand the current healthcare system and its resource environment to plan a rational approach to disseminating and implementing mental healthcare reform ideas (Docrat et al., 2019).

According to the World Health Organisation (WHO) 2008 report, compelling data shows the chronic shortage and disproportionate distribution of trained mental healthcare workers, which threatens to achieve universal healthcare coverage and reduce healthcare inequalities. Insufficient healthcare professionals impact the patient flow processes and how the healthcare system functions to ensure effective treatment for its presenting patients (Agyapong et al., 2015; Wakida et al., 2019). The increased demand for treatment accessibility and prevalence necessitates exploring alternative methods for mental health reforms in LMICs, such as task shifting (Shamhmalak et al., 2019). For illustration, trained healthcare support workers were implemented through task shifting and sharing strategies to tackle healthcare worker shortages during the HIV epidemic and the COVID-19 pandemic (Lehmann et al., 2009; Kola, 2020).

Considering the shortages of healthcare professionals, the WHO shares guidelines and recommendations, introducing task shifting as a significant shift to unburden existing mental healthcare providers by delegating tasks to less qualified providers (Jacobs et al., 2021). Overpopulation in primary healthcare clinics and hospitals is evidence of the system's severe mental health workforce shortage and inadequacy to meet the population's needs (de Kock & Pillay, 2019; WHO, 2022). The organisation argues that one of the ways to expand mental healthcare is through providing and integrating responsive and comprehensive care services in community-based settings, using members of the same community as community health workers for starters (Maconick et al., 2018). Such upscaling recommendations address severe resource shortages targeting the substantial treatment seeker to treatment provider gap whilst addressing the burden of mental healthcare (Docrat et al., 2019; Hoeft et al., 2019).

Previously referred to as substitution, task shifting is technically not a new concept; it has either been used in response to an emergency or as a method to provide effective and adequate care in understaffed facilities (Lehmann et al., 2009). Task sharing is separate from

task sharing; task shifting is the redistribution and delegation of tasks from highly qualified healthcare workers to workers with fewer qualifications and minimal training (McInnis & Merajver, 2011; Shahmalak et al., 2019; WHO, 2008). In contrast, task sharing focuses on the collaboration between health workers in different levels of training to deliver a task or service (Orkin et al., 2021). Although task shifting alone will not end the shortage of mental health workers, it offers a realistic approach to increasing access to mental healthcare services and optimising the performance of health workers in resource-poor settings (Dawson et al., 2014; Shahmalak et al., 2019).

Task-shifting interventions offer a space to explore methods of dissemination in order to cater to the inadequate healthcare system that continues to disadvantage a population of individuals with a constellation of mental health conditions (Purgato et al., 2020). These interventions typically employ a collaborative care approach that addresses the deficits in quality care and allows for improving treatment services and long-term healthcare management (Hoeft et al., 2019; Raviola et al., 2019). Because healthcare inequalities are omnipresent in LMICs, especially in rural areas, many communities remain dependent on external support and healthcare reform, such as task-shifting interventions (Sibeko et al., 2018). This idea substantiates the need for research exploring integrated primary mental healthcare using task-shifting models (Petersen et al., 2019).

Furthermore, task shifting involves training individuals with little to no prior formal background or training in mental healthcare to implement a specific intervention (Raviola et al., 2019). Training of lay workers occurs over a couple of days, which involves intensive training in the intervention program or protocol and complementary health system training to reduce obstacles in treatment delivery (Rauch et al., 2012; Rossouw et al., 2018). Part of the intensive training teaches more nuanced skills, such as reflecting and interpreting their client's skills, and the ability to utilise physical aids, such as client and provider manuals protocol (Jacobs et al., 2021; Rauch et al., 2017).

Although pilot studies show evidence for the effective upscaling of mental health services using individuals without specialised training, it is pivotal to note that the feasibility of the task-shifting intervention is also impacted by the acceptability and uptake within the community (Galvin & Byansi, 2020). Reflecting on the existing findings, relevant stakeholders should define the framework for task shifting to ensure harmony and stability in services

(WHO, 2008). Similarly, adequate supervision, economic support, and social structure must guide the intervention to ensure that it is not associated with an overstretch of healthcare support workers and unethical practices (Mijovic et al., 2016). While these conditions may seem insignificant, they are critiqued determinants that have impacted the sustainability of many task-shifting interventions in LMIC (Raviola et al., 2019).

Lastly, the futility of solely relying on increasing the number of mental health professionals to close the treatment gap advocates a need to develop holistic frameworks and models for treatment delivery (de Kock & Pillay, 2019). Researchers and policymakers are urged to transcend the traditional strategies of upscaling mental healthcare and create innovative approaches within the limits of each health system's development (Deimling Johns et al., 2018). Task-shifting interventions provide a simplified means of integrating core elements of upscaling strategies without the extensive resources typically required to deliver them (Raviola et al., 2019).

2.3.3 Task-shifting guidelines

According to Petersen et al. (2011), increasing access to mental healthcare without sufficient mental health providers to deliver the necessary referrals and supervision to support workers likely exacerbates the existing burden. With ongoing poverty and multiple competing needs, scaling up mental healthcare presents significant challenges (Agyapong et al., 2015). Now more than ever, it is essential to shift the plight of mental healthcare from speciality institutions towards primary care and community-based settings using innovative strategies (Purgato et al., 2022). Despite the conceptual similarities and growing depth of evidence supporting the implementation of task-shifting strategies to implement PE-PC, delivering these interventions in LMICs is bound to face several challenges and will need more support than high-income countries (Deimling Johns et al., 2018; Purgato et al., 2015).

Although there is no single model for implementing task-shifting strategies that apply to every context, the WHO developed global recommendations and guidelines to provide a framework to guide widespread implementation (WHO, 2008). There is a broad agreement that to ensure replicability and prevent mis-implementation, stakeholders and policymakers need to develop frameworks and working models (Williams, 2018). Successful implementation of

task-shifting necessitates establishing regulatory frameworks and building a capacity for training and management (Lehmann et al., 2009). While there is reported evidence of successful task-shifting, there is a considerable polarity between the ideal of community-owned and driven programmes and their realities in LMICs (Lehmann et al., 2009). Likewise, the feasibility of an intervention requires a thorough exploration of all the aspects of the intervention to determine its viability.

The first recommendation places high value on task-shifting as a method to urgently address the global shortage of healthcare professionals, and it suggests collaboration with relevant stakeholders to strengthen the approach (WHO, 2008). Previous studies have shown that significant change demands a broad array of stakeholders to fully encompass the healthcare system (Javadi et al., 2017). The involvement of relevant stakeholders includes organisations that aid in the functionality of the intervention and support it at the highest and broadest level (WHO, 2022). Careful planning of the task-shifting intervention might require developing a beneficiary referral system with organisations that have contact with identified vulnerable populations and have access to relevant infrastructure (Kohrt et al., 2018). Integrating mental healthcare into primary care settings will require coordination and consultation with facilities and stakeholders to carefully establish a planned approach that ensures sustainability (WHO, 2022).

The second recommendation highlights the need to explore and endorse frameworks that provide stability of services throughout public health needs (WHO, 2008). Researchers and relevant stakeholders should employ frameworks that emphasise intersectoral interventions and systems thinking, which involves balancing other avenues, such as employment opportunities (Raviola et al., 2019). While it may be challenging to include community members, task-shifting extends the scope of healthcare practice by reallocating resources across the healthcare system to trigger change and empower the community (Leong et al., 2021; McInnis & Merajver, 2011). Using community members promotes sustainability and cost-effectiveness because these members will likely remain in the community, unlike other mental health workers (Galvin & Byansi, 2020).

The last recommendation suggests establishing context-specific details and information on the demography of the healthcare professionals in the country (WHO, 2008). Describing context beyond locality presents it as a system of interpersonal and social mechanisms, wherein

outcomes of integrating mental healthcare are determined by the relationship between the mechanisms within the location (Deimling Johns et al., 2019). This recommendation identifies the bottlenecks to delivering mental healthcare by assessing context-specific barriers and lack of resources (Petersen et al., 2011). As previously stated, each country will likely make a wide range of choices concerning which task-shifting practices to employ and the scale and speed at which to implement them (Deimling Johns et al., 2018; Purgato et al., 2015; WHO, 2008).

Furthermore, interventions should be simplified and packaged in ways that cater to the health system they are implementing (McInnis & Merajver, 2011). Because task-shifting in LMICs is typically associated with overstretching of roles and unethical practices, support and supervision are necessary to ensure roles are adhered to (Mendenhall et al., 2014; Mijovic et al., 2016). According to Lehmann et al. (2009), successful task-shifting requires comprehensive and integrative reconfiguring of healthcare teams to ensure the new support workers are a cohesive addition to the system. An element equally as important is extensively training the support workers to implement the intervention and conducting basic psychoeducation lessons (Darnell et al., 2019; Rossouw et al., 2018). Participation in such psychological interventions will likely increase mental health literacy and awareness within the community (Purgato et al., 2020).

Although sufficient evidence shows the successful implementation of task-shifting interventions, there remains a great debate about the efficacy, modalities and feasibility of such approaches in LMICs (Lehmann et al., 2009). Likewise, questions arise as to whether the lack of adequate resources in LMICs makes task-shifting a short-term solution. Because only a handful of studies from LMICs have explored the experiences of the support workers responsible for implementing and delivering these interventions, this study will significantly contribute to that area in task-shifting research (Shahmalak et al., 2019). Lastly, the present study's findings will address the existing knowledge gap concerning the feasibility of task-shifting PE-PC in a low-resource context.

2.4 Theoretical Underpinnings

2.4.1 Diffusion Theory

Due to only a fraction of research products being translated to policy and practice, a significant amount of resources have been invested in developing interventions to implement healthcare improvements successfully (Tabak et al., 2012). Integrating research to practice spans three bodies of literature – diffusion, dissemination and implementation – that have attempted to explain and guide efforts influencing knowledge translation (Green et al., 2009). These three variations bring to attention how interventions are often developed without accounting for the contexts in which they would be applied, and they help determine which components of the adoption process will require additional efforts if diffusion is to take place (Green et al., 2009; Sanson-Fisher, 2004).

Diffusion theory can help explain why several effective treatments are not being used and suggest strategies to improve the dissemination and implementation process (Gotham, 2004). It is a social process among people responding to learning about an innovation to extend or improve healthcare (Dearing et al., 2018). Previous work on diffusion theory and research found a history of theoretical and empirical attempts to understand how ideas, policies and practices spread naturally (Green et al., 2009). As a process that aids in adopting innovations and interventions, diffusion is typically referred to as bridging the research-to-practice gap or knowledge utilisation (Gotham, 2004). As a result, diffusion theory was used in the present study to better understand the qualitative data regarding the feasibility of PE-PC in a low-resource setting.

Likewise, the underlying problem or blame for gaps between research and practice might be due to how the production and dissemination of evidence are centrally organised. In contrast, application and implementation are decentralised and widely distributed (Green et al., 2009). For illustration, distance is created by the difference in the supply and demand of innovations, wherein existing evidence is oriented according to controlled experiments that might not translate practically (Gotham, 2004). Factors such as the characteristics of the adopters, the general pros and cons of the innovation, and the social and political context act as independent variables influencing diffusion or the lack thereof (Dearing et al., 2018).

Setting aside the inconsistent and varied terminology and models, vital overlapping components have been adapted from Rogers's (1983) model that explains how diffusion occurs (Gotham, 2004; Sanson-Fisher, 2004). These three components include innovation

development, dissemination and implementation (adapted from Gotham, 2004). The decision to develop an innovation is driven primarily by researchers identifying a problem that needs to be addressed through an innovative approach (Green et al., 2009). This stage involves developing an efficacious treatment or technology from clinical evidence and moving it to a real-world setting while maintaining its efficacy (Dearing et al., 2018; Gotham, 2004).

Following the development is dissemination, an active approach of distributing the information of evidence-based interventions to the target audience to increase chances for adoption (Tabak et al., 2012). Dissemination ensures that clinicians and relevant organisations adopt innovations without delay to maximise the benefits of the research (Paina et al., 2019). It involves employing strategic models that provide systematic ways to channel the spread of innovation (Sanson-Fisher, 2004). Dissemination research includes investigating how information on innovations should be distributed, for example, through written material, seminars, and workshops (Gotham, 2004). While similar and easy to confuse, dissemination and diffusion practices are distinct (Dearing et al., 2018).

Implementation is the process of integrating evidence-based interventions within a real-world setting (Tabak et al., 2012). It is more recent in literature and emerged from recognising that practical application and adoption tend to deviate or take new forms (Green et al., 2009). Implementation looks at how innovations are used in practice concerning how they influence the effects of the innovation (Gotham, 2004). It is the research component of discussion and focuses on what happens before, during and after the adoption of an innovation (Dearing et al., 2018). One of the most essential elements of diffusion and implementation is reinvention. Reinvention is the degree to which changes are made to an innovation before its dissemination to increase the likelihood of its adoption (Dearing et al., 2018; Gotham, 2004).

Stakeholders enabling and supporting reinventions serve to produce sustainable use of the innovations, and it is more prominent in public and community-based settings to cater to the needs of that system (Dearing et al., 2018; Tabak et al., 2012). Because the public mental health systems influence treatment implementation, they must be monitored to ensure the innovation's effectiveness (Gotham, 2004). A primary method of measuring reinvention and adaptation is fidelity. Fidelity explains the extent to which the implementation of an innovation deviates from how it was intended before scale-up (Dearing et al., 2018). It is crucial in many primary care and public health interventions because they contain diverse conditions that

moderate the relationship between the intervention and its outcomes (Green et al., 2009; Sanson-Fisher, 2004).

Although implementation research lags behind the other bodies of knowledge utilisation, it is particularly vital in regulating specific interventions and their modalities (Gotham, 2004). In organisational settings, implementation science extends the focus on an innovation post-dissemination to understand its effectiveness in realistic practice conditions (Dearing et al., 2018). In the pipeline of research to practice, dissemination ends when a decision is taken to adopt the intervention or innovation (Gotham, 2004). On the contrary, diffusion theory encompasses an equal focus on both processes, emphasising how they are, in many respects, interdependent (Tabak et al., 2012). As such, unpacking diffusion theory and research principles may offer explanatory concepts and approaches to operationalise innovations (Dearing et al., 2018; Green et al., 2009).

Lastly, future work should clarify the constructs and terminology of diffusion, including factors that drive or restrain it. The widespread disappointment with the flow of research and scientific information to practice calls for more practice-based research to inform the diffusion of innovations through development, dissemination and implementation (Green et al., 2009). Knowledge utilisation requires more than efficacy trials; researchers are urged to explore the strategies applied to determine what causes the research to practice gap.

Chapter Summary

The chapter above was a systematic review of literature providing a description, summary and critical evaluation of the sources relevant to the research problem being investigated. The chapter gave an overview of the main points addressed throughout the research study regarding PTSD, PE-PC and task-shifting. The chapter began with a section defining and outlining PTSD, its symptomatology, diagnostic criteria as per DSM-5, and its prevalence locally and globally. The chapter further unpacked the treatment guidelines for PTSD, the available psychotherapies and the approach selected for the study, PE-PC. Notably, the chapter addressed the WHO's recommendations to innovatively implement and expand mental healthcare within low-resourced contexts through task-shifting. Because the premise of the research study is exploring task shifting, the chapter provided a theoretical base for understanding the concept. Lastly, the chapter looked at the theoretical basis of the research

study, which focused on diffusion theory as a framework drawn from implementation science. Chapter 3 presents the research study's research design and methods applied.

Chapter 3

Research Design and Methodology

Chapter overview

This chapter describes the research method and design used to explore the proposed questions in order to investigate the feasibility of task-shifting PE-PC for the treatment of PTSD. Understanding that this study forms part of a larger effectiveness and acceptability project, a general summary of the first phase will be unpacked to situate this study accordingly. In addition, an overview of the chosen methodology will be provided, expanding the research design and context. The chosen research sites and their contribution to the research study are described. The sampling technique employed, the inclusion criteria, and the ethical considerations pertaining to the study are elaborated on.

Furthermore, the chapter continues to the data collection process, briefly discussing the data collection method of choice and the details involved. I describe the qualitative analysis of the collected data, including the practical steps involved in the analytical process. I begin by introducing reflexive thematic analysis, the analytical method of choice for the present study. The chapter continues with a short description of the data transcription process, a crucial data analysis element. I then proceeded to the analysis process, which was informed by Braun and Clarke's six-phase analytical process for reflexive thematic analysis.

3.1 Research Design

3.1.1 Qualitative Research for Healthcare

According to Renjith et al. (2021), healthcare research is a systematic enquiry intended to generate trustworthy evidence in medicine and overall healthcare. In healthcare, qualitative research is widely employed as a research design to understand health behaviour patterns through narrated and described lived experiences to develop behavioural theories, explore healthcare needs and subsequently design appropriate interventions (Renjith et al., 2021). Beyond all considerations, qualitative research aids in exploring why mis-implementation occurs and why promising clinical interventions do not work (Pope et al., 2021). The

researchers collaborated to co-create the meanings instead of imposing their views onto the participants' experiences.

Qualitative research can be described as an umbrella term encompassing action research, which aims to develop concepts of social phenomena in their natural settings (Al Busaida, 2008). In qualitative research, we derive the meanings from observations by examining how people make sense of the world and their connections to others (Rapport et al., 2018). For qualitative researchers, this means looking closely into and scrutinising the healthcare system, as well as the behaviours of the workforce. Importantly, qualitative researchers typically draw on both the perspectives of the patients and professionals to fully immerse in the investigation of the research and implementation occurring at the time (Norman et al., 2021).

Furthermore, qualitative research is inductive because it seeks broad generalisations from observations or gathered evidence. As argued by Collingridge and Gantt (2019), the incoming popularity of qualitative research in healthcare is partly driven by the realisation that quantitative research has limitations, such as its inability to consider the meanings attached to social healthcare phenomena. Traditional quantitative methods are appropriate in testing, for example, during randomised control trials; however, an in-depth qualitative exploration of experiences and perceptions is crucial to investigating the results of the research study's implementation within the clinical practice (Rolfe et al., 2018).

Although there is great difficulty in providing an intelligible account of qualitative data to encompass its depth, it helps present multiple socially constructed perspectives (Avis, 2005). Rather than the research focusing on obtaining objective information and evidence, they need to discern the quality of it multi-dimensionally (Pyo et al., 2023). A common logic for research would then depend on the researcher's ability to substantiate the claims they make following their suitability to the research. Likewise, the researcher must demonstrate the validity of their interpretation of the data concerning an existing theory (Holloway, 2005).

Furthermore, the foundational assumptions of qualitative research in psychology involve explaining and predicting aspects of human experience to understand their lived experiences (Collingridge & Gantt, 2019). Similarly, the concept of quality in healthcare is multidimensional and multifaceted and quantitative research might need to be more flexible to

demonstrate such (Al Busaidi, 2008). In order to enhance clinical knowledge and care, researchers must understand the experiential and interpretive elements that qualitative research unpacks. Qualitative research for healthcare is substantiated to inform the development of interventions and design its evaluation method (Pope et al., 2020).

Existing evidence from the National Institute for Health Research (NIHR) and Institutional Cochrane Collaboration suggests that there is more insight into health professionals' perceptions concerning the participation of lay health workers in healthcare practices (Al Busaidi, 2008). As a result, the application of qualitative research design for this study potentiates the adequate investigation and exploration of the complex realities to generate new knowledge on the feasibility of PE-PC in LMIC. The basis of this decision was due to the exploratory and explanatory nature of qualitative research, which aided in unpacking the "why" and "how" questions to explore the different experiences.

Using a qualitative research paradigm for healthcare played a vital role in identifying ways to improve the quality of care and the safety and support of the patients and professionals involved (Williams et al., 2019). Using qualitative methods for healthcare has provided a foundation to identify and explore the barriers to changing healthcare practices. With healthcare systems and populations at large becoming progressively complex, there was a need for paradigms that explore intervention, such as PE-PC. In addition, the results of exploring the feasibility of PE-PC in a low-resource context, such as Makhanda, would be translated to improving mental healthcare.

In addition, the underlying premise of this study that aligns it with qualitative research is that it seeks to explore the several truths and meanings that co-exist within the phenomenon of interest rather than a single truth linked to causation or correlation (Williams et al., 2019). For illustrative purposes, semi-structured interviews are a data collection method that helped obtain detailed descriptions of the TSW's experiences and perceptions. Multiple layers of implementing PE-PC through task-shifting were explored and investigated during the interview session. It was crucial to acknowledge that widening the reach to PE-PC required a clear understanding of the factors that impact the TSW's ability to implement it.

Qualitative research helps analyse the minutiae of detail in the data while adding nuance to understanding human behaviour's complexities (Williams et al., 2019). Importantly, such a

method of inquiry requires an interactive approach, including personal involvement and flexibility (Pyo et al., 2023). Collaborating with the TSWs allowed us to gather unique insights to help accomplish the research study's feasibility objectives. Because qualitative research is purposefully adapted to suit the healthcare context, it was plausible to employ it in this research study.

3.1.2 Implementation Science

The following study forms part of a larger effectiveness-implementation trial that investigates the effectiveness, feasibility, and acceptability of Prolonged Exposure for Primary Care (PE-PC) in a low-resourced community. This study aims to explore a single component of the larger project by investigating whether it is feasible for non-professional persons from a low-resourced community to implement PE-PC for the treatment of traumatic stress at a primary care level in Makhanda.

Bauer et al. (2015) reported that evidence-based practices take, on average, several years to be incorporated into the general routine of healthcare. Even then, this estimated duration must account for the fact that almost half of these practices still need to reach widespread clinical uptake, with an even lower translation into public healthcare (Bauer et al., 2015). Due to the research-to-practice gap and time lag in widespread implementation, a growing interest in translational research fuelled the development of implementation science. This gap urged researchers to reconfigure treatment and intervention development and implementation processes (Bauer & Kirchner, 2020; Baumann & Cabassa, 2020).

Implementation science is the study of strategies that aid in the uptake of evidence-based research and evidence into routine use by practitioners and policymakers (Sanetti & Collier-Meek, 2019). Implementation science aims to systematically identify and address barriers that halt the uptake of interventions to improve the quality and effectiveness of healthcare services (Yapa & Bärnighausen, 2018). Although it is a relatively new and growing field in research, significant findings have been produced over the years concerning the sustainable development and delivery of evidence-based practices (Sanetti & Collier-Meek, 2019).

Implementation science typically begins with an under-utilised practice, whereby it identifies and addresses the quality gaps and many factors that impede practice uptake at the provider,

clinic, or healthcare system level (Bauer et al., 2015). It emphasises the need to consider multiple levels of intervention and the importance of addressing barriers beyond clinical efficacy (Russell et al., 2013). These factors may include inequalities in healthcare that are persistent and rooted in the broader social, economic, and political injustice present in all levels of care (Baumann & Cabassa, 2020). In turn, the existence of these inequalities has disproportionately disadvantaged many communities.

Furthermore, approaches that aim to bridge the research evidence to practice gap are visualised across a continuum from diffusion to dissemination to implementation (Sanetti & Collier-Meek, 2019). Diffusion is on the one end of the continuum and refers to the passive spread of practices. At the same time, dissemination reflects the efforts to spread information regarding the new practices and plays a crucial role in introducing interventions to the broader focus (Russell et al., 2013). Implementation is on the other end and is defined by the active process of integrating the intervention into practice (Sanetti & Collier-Meek, 2019). As such, implementation science functions to merge these approaches to support the navigation of the often-fragmented intervention practices in the public healthcare system.

Importantly, using implementation science frameworks has highlighted the stark underrepresentation of vulnerable groups in clinical trials to ensure quality care across diverse populations (Bauer & Kirchner, 2020). The continued exclusion of communities that have been historically underserved in clinical trials has created blind spots not only in research but also in the moving of evidence and research to practice (Baumann & Cabassa, 2020; Bauer & Kirchner, 2020). Clearly, the sustainability of evidence-based interventions, practices, and policies in community-level settings relies highly on integrating systems that emphasise the importance of contextual factors (Le et al., 2022).

As argued above, the development of implementation science was an effort to draw from existing implementation strategies and create opportunities to bridge evidence to practice. In order to do that effectively while adequately locating interventions to the contextual realities and conditions, researchers have to employ a collaborative lens (Le et al., 2022). Likewise, a suggested blending of efficacy, implementation and effectiveness designs and stages of intervention development could improve the knowledge creation and implementation rate into practice (Curran et al., 2012). There are three types of effectiveness-implementation hybrid

designs elaborated in the table below that vary following their primary focus within the intervention.

Table 1: *Types of effectiveness-implementation hybrid designs.*

Study Designs	**Hybrid type 1**	**Hybrid type 2**	**Hybrid type 3**
Primary Aim	Determine effectiveness outcomes of an intervention.	Dual focus on effectiveness and implementation outcomes.	Determine implementation outcomes.
Secondary Aim	Contextualises implementation.	Evaluate feasibility.	Measure clinical outcome effects.
Design Considerations	Identify implementation barriers and facilitators at multiple levels of organisation.	Poor adoption and fidelity can compromise effectiveness trial.	Not ideal for outcomes that require primary data collection.

Note. [1]*Table contains information on the types of effectiveness-implementation hybrid designs.*

Because the problem of non-uptake of clinical innovations and interventions is longstanding and persistent, the effectiveness-implementation hybrid designs aid in identifying barriers and facilitators to implementing interventions in real-world settings (Landes et al., 2019). Using hybrid effectiveness-implementation designs offers a potential solution to the evidence to practice lag, gap, and health equity (Brownson et al., 2021). The following study employed the type-2 hybrid design since it evaluates the feasibility of the implementation in addition to the effectiveness outcomes (Bernet et al., 2013; Curran et al., 2012; Landers et al., 2019).

[1] Adapted from "An introduction to effectiveness-implementation hybrid designs," by S. J., Landes, S. A., McBain, and G. M, Curran, 2020, *Psychiatry research, 283.*

Lastly, some of the observed limitations in implementation research include the inadequate systems approach to addressing social determinants, also understood as implementation barriers (Brownson et al., 2021). The origin of this inadequacy is often a result of a lack of diversity in study samples and populations that unintentionally benefit those groups and potentially exacerbate health inequalities (Brownson et al., 2021; Celik et al., 2015). Ultimately, implementation science aims to understand what needs to be done to implement and sustain interventions that address emergent challenges. Therefore, it is paramount for researchers to design practical trials with implementation and dissemination components (Landes et al., 2019).

3.1.3 Research Question

How do trauma support workers experience and perceive implementing PE-PC for the treatment of traumatic stress among trauma survivors from a resource-constrained setting in the Eastern Cape?

3.1.4 Research Objectives

1. To identify the facilitators and barriers to implementing PE-PC in a low-resource community.
2. To explore how the TSWs perceive the utility of PE-PC for the treatment of PTSD in the low-resource community.
3. To explore how the TSW's experience implementing PE-PC, an exposure therapy, for the treatment of PTSD in a low-resource community.

3.2 Research Context

According to Agyapong et al. (2015), scaling up mental healthcare that is safe, effective, and culturally sound presents a significant challenge in situations with multiple competing needs. Data suggests that 3 out of 4 individuals who would benefit from trauma focused treatment do not receive any because of inadequate mental healthcare (De Kock & Pillay, 2018). With over three decades of PTSD research in the United States, PE has been pronounced as the first-line treatment; however, there lacks sufficient evidence ascertaining its effectiveness and feasibility in culturally diverse contexts, such as Makhanda (McLean & Foa,

2013). Similarly, exploring the feasibility of task-shifting PE-PC in a low-resourced community in Makhanda will expand the reach of trauma-focused treatment and contribute to the existing knowledge gap.

With an estimated 75% of South Africans having experienced some form of trauma, the high prevalence of PTSD is a recognised public mental health concern (De Kock & Pillay, 2018; Koenen et al., 2012). Overall, trauma and violence in South Africa have been one of the highest in the world, with violence against women by intimate partners being nearly six times the global average (Bryant, 2019; Seedat et al., 2009). Regrettably, factors such as ongoing adversity, poverty and inaccessible mental healthcare moderate the traumatic stressor's pathogenic impact (McNally, 2018). These factors place socioeconomically disadvantaged populations, such as those in LMIC, at a heightened risk of developing PTSD. As such, there is an urgent need to improve access to evidence-based and trauma-focused treatment interventions for PTSD in low-resourced contexts.

A vast majority of the community in Makhanda has a historically disadvantaged background that continues to impact their present day-to-day because of South Africa's political past. Added to the high unemployment rate, the community's demographic profile suggests that almost half of the population lives in poverty, particularly in Joza, one of the areas where the research sites are located (Eastern Cape Socio-Economic Consultative Council (ECSEC), 2017). Although Makhanda is primarily Xhosa-speaking, it comprises communities from diverse cultural contexts and racial backgrounds. To reiterate Agyapong et al. (2015), the community's cultural diversity alludes to being an ideal location to explore whether PE-PC is culturally sound whilst upscaling trauma-focused treatment.

Because the main idea of implementing PE-PC is to increase reach to evidence-based PTSD treatment at a primary care level, affiliation with each organisation was based on the types of resources and services offered at a general and primary care level. To ensure the sustainable implementation of PE-PC, the PI of the leading project and I met the relevant stakeholders to discuss an integrative and collaborative model. Although there is significant paucity in literature concerning PE-PC in LMIC, the existing findings supported its implementation in a low-resourced context, notwithstanding the multiple challenges in the LMIC healthcare system.

The study was conducted at four principal organisations, three non-profit organisations, and one is university-based. The four leading organisations are the Assumption Development Centre (ADC), Association for Persons with Disabilities (APD), Child Welfare and Rhodes University. To increase the research project's reach to the community and do promotional work, TSWs were placed at some of the primary care clinics in the main areas of the community. The four organisations did not primarily deliver mental healthcare-related services; however, their collaboration was supportive and essential. Above just offering logistical resources such as space, some organisations were a continuous source of potential trauma survivors.

3.3 Research Organisations

Over the course of the research study, a number of organisations and stakeholders engaged with the research project; however, only the following formed part of the study:

3.3.1 Assumption Development Centre (ADC)

The ADC is located at the heart of the Joza community. This space partners with Rhodes University and Makana municipality to transform the community's economy. This transformation is done by providing and creating opportunities that aid and support the youth, aspiring entrepreneurs, job seekers and the community at large. In addition to the number of services offered by the ADC, the centre provides counselling services via its Counselling Hub. Through a partnership with the centre, the larger project was able to add a trauma-focused intervention, PE-PC, to their service list with the aid of the TSWs.

Although ADC is not a trauma or mental health centre in and of itself, it was an excellent space to initiate the project because it had an influx of people coming in for the other services it provides. Most importantly, it had an existing counselling hub with a database of individuals who might need trauma-focused treatment and space to integrate the TSWs.

3.3.2 Primary care clinics

Even though not much of the implementation relating to the study took place in the community's primary care clinics, some TSWs were placed across a few clinics for a range of

work, including mental health promotion. The research project did not work directly with the clinics because of a lack of available resources and capacity to allow for additional services. However, the research project worked hand in hand with the TSWs in creating campaigns for the intervention alongside the stakeholders involved in the sites. The placements involved Joza Clinic, V. Shumane Clinic, Raglan Road Clinic, and Settlers Day Hospital.

Because mental healthcare was a scarce service in these clinics and only basic primary healthcare was offered, introducing the mental healthcare promotion element with a focus on PTSD and PE-PC created a foundation for treatment seeking. Those clients who met the diagnostic criteria for PTSD were referred to the ADC for intervention, where they were guaranteed support.

3.3.3 Rhodes University

To expand the reach of trauma support and treatment, the study was extended to the student population on the Rhodes University campus. Although a counselling centre providing free services exists, due to minimal staffing, it cannot cater to every one of those in need of therapeutic support. Using the psychology department as a site facilitated the expansion of the services provided by the counselling centre, as it had been done with ADC. The affiliation with Rhodes University as another organisation provided student participants needing trauma treatment and student TSWs. Significantly, having the study on campus simplified the reach of effective treatment for students. Because students form part of a vulnerable population at an increased risk of PTSD from various stressors prominent in their lives, this was a vital decision for their mental healthcare needs (Cusacks et al., 2019).

3.4 Sampling Strategy

Using a purposive sampling technique, two sample cohorts of TSWs from the larger research project were selected for the study. The researchers selected an overall sample of fourteen (n=14) TSWs for inclusion; five (n=5) were from the Joza community cohort, and the other nine (n=9) were students from Rhodes University. Despite a small sample size, an in-depth exploration of task shifting was feasible due to the TSWs' extensive knowledge of the topic.

Purposive sampling was employed because it is effective in helping explore detailed information and knowledge about the study within context (Collingridge & Gantt, 2019). This sampling technique aims to include a sample to explore and obtain an extensive understanding of the TSW's perceptions, beliefs and experiences concerning the intervention's implementation. In doing so, the technique would aid in improving the study's rigour and the data's overall trustworthiness (Campbell et al., 2020).

As stated above, purposive sampling moves away from randomised forms of sampling in order to ensure that the sample cohort aligns with the research aims. The principal researcher informed the conditions and criteria employed in selecting the sample group to increase the sample group's credibility. Although purposive sampling typically has a small sample size, this aids in prioritising information-rich cases specific to the phenomenon being studied (Palinkas et al., 2015). Emphasis was placed on the complex engagement with the data collected from the sample group.

There are several reasons why purposive sampling is ideal for this study; the first highlights the crucial role of collecting quality evidence within a manageable amount of data. To further elaborate, it facilitated the selection of individuals who were defined by their role in the implementation process to adequately capture experiences relating to the study's research questions (Palinkas et al., 2015). This technique was convenient and aided in ensuring that a point of data saturation would easily be acquired by narrowing down the sample group.

To reiterate, the decision for the sample size was based on a principle called data saturation; typically, a sample size of 6-10 is adequate (Hamilton & Finley, 2019). Data saturation is understood as the point during research collection where enough data has been collected to draw necessary conclusions, which gives the idea that the researcher has captured all possible data (Renjith et al., 2021). Because the suggested sample size to reach data saturation varies, it is considered good practice for the researcher to evaluate their data before halting data collection.

While purposive sampling has the advantage of being cost and time-efficient, it is prone to volunteer bias, which occurs when participants choose whether or not to participate in a study (Blackstone, 2018). In addition to volunteer bias, purposive sampling is prone to

judgment errors concerning research findings because it does not necessarily represent the broader population. However, qualitative sampling techniques are not probability-based, increasing the risk of no generalisability.

3.4.1 Inclusion Criteria

The research study had two cohorts of TSWs with different inclusion requirements stated in the recruitment advertisements; however, overlapping competencies were expected from both TSWs. An inclusion rationale was created to define the requirements for the target audience framed according to the research goals. The inclusion criteria were created to help identify the sample group for the research study consistently and reliably.

Furthermore, there are essential participatory requirements that both cohorts had to adhere to for their continued inclusion within the project and research study. One of the requirements exists for fidelity purposes and includes attending all the intervention's training sessions as previously stipulated. The training programme for the cohort of community members consisted of basic counselling, CBT and PE-PC training over six days. On the contrary, the training programme for the students consisted of PE-PC training over two days.

There was a difference between the two cohorts' highest level of education, which in turn influenced the training programme and duration. The cohort of students was required to have obtained their bachelor's degree and pursue an honours degree in psychology. In comparison, most of the community members' highest qualification was a grade 12 certificate. In addition, any formal basic counselling experience or certification worked to their advantage and increased their likelihood of selection. TSWS needed to have competent social interacting skills and maintain psychological etiquette, such as empathy and active listening skills.

As mentioned above, the duration of the training programme was determined by the content of the training. Because the students had a strong foundation in psychology, their training programme only consisted of the PE-PC training, which was guided by a predetermined framework and protocol. On the contrary, the community cohort programme was supplemented with basic counselling skills training and CBT training. Incorporating basic

counselling skills and CBT training was intended to teach the TSWs more nuanced skills, such as reflecting, verbal cues and empathetic behaviours.

It was expected for TSWs to attend 80% of the 12 scheduled weekly group consultation and supervision meetings, which were conducted in person or on Zoom. During the PE-PC intervention, TSWs had to complete essential administrative duties such as filling and submitting measurement scores (PCL-5 and PHQ-9) and keeping session notes and assessment records. The TSWs also had to support and facilitate at least four PE-PC contact sessions with trauma survivors. They had to possess skills and traits to maintain professional and ethical conduct during the implementation and provide safety and support to the trauma survivors.

***Table 2**: TSWs Demographics*

Variable	n = 13
Age	
Range	> 21
Sex	
Male	2
Female	11
Language	
English	13
Afrikaans	1
Xhosa	8
Education	
Grade 12	3
Undergraduate	2
Postgraduate	8
Cohort details	
Rhodes University Student	8
Joza Community Member	5

3.4.1.1 Community members of Makhanda

A recruitment advertisement was created and sent out to specific organisations and the community members of Joza location. The TSWs had to be 18 years or older, with no sex and gender specification. Although the highest level of education required was grade 12, individuals with tertiary diplomas were accepted. The TSWs had to be fluent in the local

languages, English and isiXhosa, with importance placed on their ability to read and write in English. The TSWs had to meet standard training requirements and essential competencies of a TSW, such as maintaining ethical practice, professionalism and confidentiality.

3.4.1.2 Rhodes University Students

The course coordinator circulated a recruitment advertisement to the Psychology honours students to alert them of an opportunity to participate in the research student as TSWs. Although much of the inclusion criteria was standard across both cohorts, it was slightly modified because of the nature of this population. The students were required to have obtained their Bachelor's degree and pursue an Honours degree in Psychology. The sample group consisted of students above the age of 21. Understanding that Rhodes University was an English medium institution, English literacy was expected. However, fluency in local languages such as Afrikaans and isiXhosa was essential.

3.5 Ethical Considerations

Typically, the ethical value of a research study must be distinct from the researcher's interests in the community or society in which the study is taking place. Qualitative healthcare researchers must demonstrate to themselves and others that their research study benefits its participants and contributes to the scientific understanding of the phenomenon of interest. Conducting ethical research requires a clear understanding of what is good vs what brings harm to the patients, healthcare providers and health system involved. As such, normative ethics and moral principles should be considered when planning implementation, which involves value judgment and behavioural assessment (Iphofen, 2005).

For ethical approval, the researcher had to demonstrate to the ethics committees and the various stakeholders how their proposed study benefited its participants and contributed to conceptualising the phenomenon of interest. The developed research proposal stipulated the ethical issues to consider and how they would be accounted for and managed. The proposal was submitted and received ethical approval from the Rhodes University Ethical Standards Committee (RUESC) and the Research Proposal and Ethics Review Committee (RPERC) in the Psychology department (see Appendix A: Rhodes University Ethical Approval). The

research proposal had to clearly illustrate how beneficence and non-maleficence were the foundational basics of the proposed research study.

Since the research study introduced a new intervention into a community, the researcher needed to remain reflexive because ensuring ethical practice and conduct required continuous renegotiation with every party involved. Understanding the complex interplay of conducting qualitative research and coordinating ethical research became an unfolding process that extended beyond the processes involved in completing the research study. Above and beyond primary ethical considerations and principles, there was ongoing thought and attention to accomplishing ethical practice thoroughly, even after the formal ethics review process. Ultimately, advocating for and prioritising moral and ethical principles was at the forefront of the research study.

Although this was a low-risk research study, there was an emphasis placed on adhering to ethical standards because the study involved human participants from the community. Appropriate ethical standards such as transparency and integrity were employed throughout the research study to ensure the safeguarding of the TSWs. Respect was crucial in ensuring that the power dynamic between the researchers and TSWs came across as something other than exploitive or purely research-driven, as it is considered unethical to expedient participants. Other primary considerations included informed consent, confidentiality, beneficence, non-maleficence and anonymity.

An essential first step was obtaining written informed consent from the TSWs to help facilitate their autonomy in being part of the research study (see Appendix B: TSW Consent Form). Informed consent emphasised voluntary and informed participation and the TSW's right to refuse participation or withdraw without any consequence. Beyond informed consent being a participation agreement, it provided a space for the researcher to communicate all information about participation to those involved, including the risks and benefits. Although an incentive was paid to the TSWs from the Joza location for the consultation meetings and PE-PC sessions, this was not to coerce them into participating but rather to create a source of income. The TSWs were paid for their meeting attendance and each PE-PC consultation session.

Furthermore, confidentiality and anonymity had to be maintained during the research study concerning the TSW's clients. During the group consultation meetings, the TSWs were

advised against using their clients' names or identifiable characteristics to prevent the other TSWs from identifying the clients. Once again, the safety of the TSWs and their clients had to be observed to ensure continued integrity and respect. Likewise, where personal information such as contact details was provided, cautionary measures were taken to ensure the information was kept safe. The research administrator managed personal and contact details and supervised and allocated each client to a TSW.

Due to the nature of the study, a safety plan was created with the TSWs as a cognisant response to the potential risks and adverse reactions of repetitively exposing clients to their traumas. This safety plan included a list of persons to contact and steps to follow depending on the severity and urgency of the situation and the client's emotional and mental condition. Importantly, for the psychological safety of the TSWs, therapeutical support was available through the ADC Counselling Hub and Rhodes University Psychology Clinic. Lastly, because researching human participants is complex, there is a certain degree of expected ethical dilemmas; however, there were plans to manage them.

3.6 Data collection

In qualitative research for healthcare, researchers may prefer observing participants in their natural contexts or analysing existing text; however, in this research study, semi-structured interviews were the method of choice (Hamilton & Finley, 2019). Semi-structured interviews were the most straightforward approach to obtaining detailed data on task-shifting PE-PC (Barrett & Twycross, 2018). According to Taylor (2005), *qualitative research interviews* can be loosely defined as purposeful conversations, highlighting the method's flexibility and adaptability. The interview explored the experiences and perceptions of implementing PE-PC from the TSWs' perspective. The researcher conducted the interviews and was urged to have an open and curious attitude and to hold a non-judgmental space to ease the TSWs into expressing themselves throughout the interview.

Deciding where to place the interview protocol and guide on the "structural spectrum" relied on how much personal reflection the research questions required (Barrett & Twycross, 2018, p,63). Even though a rigidly structured interview would have been easier to administer, semi-structured interviewers were a better fit for the research study. Semi-structured interviews

allowed the interviewer to explicitly ask questions that captured the core elements of the implementation while allowing the TSW to bring in their personality conversationally (Barrett & Twycross, 2018). The data collected from the interviews provided detailed insight into how implementation interventions potentiate the alteration and adjustment of care and allowed us to explore how decisions were made (Barrett & Twycross, 2018).

Even though the semi-structured interview is typically in dialogue format, it was structured to ensure the research objectives were adequately explored (Taylor, 2005). The interview's structure was obtained through a developed interview protocol containing practical questions about the implementation process (Roberts, 2020). Likewise, creating a protocol aided the researcher in actively participating in the interview by not derailing the process by asking lengthy, vague, or leading questions (Roberts, 2020). Fortunately, several guidelines have been created for novice researchers to aid in conducting interviews for quality data (Barrett & Twycross, 2018); McGrath et al., 2019; Roberts, 2020).

Despite the benefits of conducting interviews for qualitative data collection, they presented several challenges. Since most interviews were audio recorded, they had to be transcribed before data analysis occurred. Transcribing interviews can be an extremely time-consuming task that requires transcription to be carefully pored over word by word. Another common challenge with interviews is research bias, resulting from leading questions that might influence the TSWs' responses. Therefore, guidelines were followed to ensure quality data was collected and the research objectives observed.

3.6.1 Interview guide

An interview guide was developed alongside the project's primary investigator (PI) to aid in pursuing the same lines of inquiry and planning a series of topics to explore (Al Busaidi, 2008). Having an interview guide with well-planned questions helped maintain the interview flow and allowed the interviewer to remain focused on what the TSW was saying (Roberts, 2020). Interview guides are increasingly vital in pilot studies where the interviewer cannot conduct preliminary interview sessions. Despite how simplistic interviewing can be, being attentive throughout was challenging but essential. It aided with keeping track of the information from the client's responses and prevented the repetition of questions.

Additionally, the guide was created to maintain uniformity and a form of standardisation between each interview (see Appendix C: Interview Guide). Unlike quantitative research, reliability and validity are challenging to represent in qualitative research; however, having an interview guide that frequently asked similar questions ensured the study was reliable and rigorous. An interview guide allowed me to establish consistency over time, forming an essential rigour element. As Johnson et al. (2020) stated, rigour in qualitative research for healthcare is achieved when each element of the study is systematic and transparent. Using an interview guide substantiated trust in the data used to inform the conclusions drawn in the research study.

The interview guide was a valuable asset for the researcher, even beyond the scope of the interview session. For illustration, during the data analysis process, the interview guide will clarify more complex responses that require attentiveness for quality data production. Adding language discrepancies and having a set of questions allowed the researcher to transcribe and analyse the data, knowing what questions were being answered. Preparing and reviewing the interview guide helped identify potential problems and review the effectiveness of each question. The interview guide was structured to explore each element and stage the TSWs were involved in the research study, such as the training process, the implementation of PE-PC and the social contextual aspect of the intervention.

The questions relating to the training process asked the TSWs to describe their experience of the relevant training sessions, including their experience with the learning material, such as the PE-PC manuals. This section had questions on the duration of the training and how it influenced the TSW's ability to retain the content comprehensively. The questions aimed to unpack the TSWs' experiences of receiving training and what changes could be made to improve. Other questions focused on their confidence post-training, for example, "Was the training efficient in preparing you for implementing PE-PC?" followed by a prompt on their readiness.

The social contextual set of questions focused on aspects of the circumstances that make up the setting and influence uptake. These questions highlighted how context as a location and social condition determine much of the implementation process (Rathod et al., 2017; Wakida et al., 2017). For illustrative purposes, the TSWs were questioned on how they perceived the general uptake of the intervention within the community and what determinants factored in

delivery. Alongside these questions, TSWs were prompted on how stigma, mental health literacy and treatment-seeking behaviour acted as moderators. Likewise, social factors such as ongoing poverty, crime and inadequate services were investigated.

In addition, intervention-related questions aimed to explore how the TSWs experienced implementing PE-PC. The first question asks the TSWs to describe their role as TSWs and further explores the barriers and facilitators accompanying the role. The various elements of the TSW role, such as the helpfulness of the weekly consultation meetings and consultation supervision, were also investigated. For implementation-related questions, it was important that the interviewer clearly articulate what knowledge they wanted to gain from the TSW's perceptions as participants in this role. Because only a few studies from LMICs have explored the experiences and perceptions of TSWs, the questions needed to be framed to not only ask descriptive questions but also highlight an understanding of relevance to the discipline (Jacobs et al., 2021; Shahmalak et al., 2019)

Although the main reason for an interview guide is to bring structure and formality, it was kept flexible and adaptable throughout the data collection process. Keeping the interview guide flexible aids in its reformulation and revision, allowing the interviewer to explore and engage with the TSWs even beyond it. As the research study evolved with a new sample cohort, the interview guide was revised to include new concepts and areas of interest that needed further exploration (Roberts, 2020). The initial interview guide served as a baseline and was used for continued exploration as data collection occurred.

Lastly, developing an interview guide was helpful for a novice researcher because it was an easy reference point for what needed to be explored and addressed during the interviews. Even though an interview guide was developed, the interview process was not approached in a stepwise sequence; it was flexible enough to change according to the TSW.

3.6.2 Interview procedure

Individual interviews are a purposeful social interaction between the interviewer or researcher and the participant, whereby the participant makes sense of the phenomenon and topic of interest from their subjective experience (Pope et al., 2020; Roberts, 2020). They are typically conducted one-on-one between the interviewer and participant, although another

person may be included for language interpretation or as an additional facilitator. Individual interviews are recommended because they help draw out the participant's views and in-depth descriptions of their experiences (Al Busaidi, 2008).

Because there were two cohorts of TSWs, I conducted two rounds of semi-structured interviews. The same interview guide was used during interviews for both cohorts, where minor changes were made to clarify specific ideas and elaborate on others. The interview guide was also restructured to create seamlessness between each question and prompt; beyond that, the questions were kept the same for comparative purposes. The TSWs were informed of the interview before the time, and their voluntary participation, which involved establishing verbal consent, was emphasised.

I scheduled interviews with five TSWs from the community-based cohort for the first round between October and November 2022. This specific timeframe was selected because each of the TSWs had sufficiently taken part in the mental health promotion campaigns that were a new addition to the study's deliverables. The TSWs had also adhered to each requirement for their involvement in the interviews. Likewise, the end of the year 2022 was a significant marker for the completion of the initial phase of the larger research project, and this signified the beginning of the data collection process.

Furthermore, if some of the TSWs would not continue to participate the following year, my duty was to ensure that preliminary data had been collected. All the interviews were 45 minutes to an hour and took place at the ADC throughout a couple of days. There was a slight back and forth when trying to secure available dates and times with the TSWs; however, eventually, we found a schedule that would work for each one. The location was selected because it had been the leading site in the Joza location and was accessible for each of the TSWs regardless of their placement.

The second round of interviews took place in May 2023 with the student cohort of TSWs. At this point of the research study, the TSWs had all completed training and implemented PE-PC for clients for many sessions. The interviews were an hour each with nine of the TSWs in the Psychology department where they had been placed. Similar to the first interviews, this was the ideal location for the TSWs without additional financial expenses on

travelling to the location. Of the nine interviews, one was conducted online via Zoom because the TSW could not be in Makhanda during that time.

In the same light, the venue of the interviews determined how smoothly the sessions took place. The familiarity of being in the selected spaces facilitated the interview with both cohorts because they were comfortable enough to engage adequately. A safe and quiet venue helped with the interview process because there were minimal disruptions and distractions. Because of such considerations, scheduling interviews can be a time-consuming challenge, making the interview process complex and tardy. In addition, a significant percentage of the TSWs rescheduled their appointments or could not attend their interviews at a given time because the mid-year examinations were taking place.

In order to ascertain authentic and reciprocal engagement, the probing questions and language used catered to each TSW during the interview. Each TSW was allowed to express themselves and engage with the questions in either English, Afrikaans or isiXhosa. Where relevant, questions were modified and refined accordingly, and follow-up questions were developed in real time based on what the TSW was communicating. Follow-up questions were essential to exploring multiple dimensions of the experiences to avoid having surface-level responses, mainly because I might only have one opportunity with each TSW (Roberts, 2020).

At the end of each interview, there was a short post-interview discussion with each TSW in a dialogue format between the TSW and me. During this period, I asked the TSWs if they had any thoughts or questions and used the time to clarify any enquiries. This process was essential to obtaining any information that might have been missed during the interview. At the same time, this time was used to address any new insights and how they would impact the research study moving forward. This discussion helped maintain trust and rapport between the TSWs and me and eased any TSWs who had experienced heightened feelings and emotions during the interview process.

3.7 Data Analysis

3.7.1 Reflexive Thematic Analysis

Qualitative data analysis is generally a non-linear process which involves moving back and forth between the phases. The researcher typically begins by familiarising themselves with the data to generate themes from the codes they have developed. Lester et al. (2020) define *thematic analysis* as an umbrella term used to capture analytic methods to identify, analyse and report patterns of themes within data. It offers the researcher a way to make sense of the collective experiences of the respondents that appear vague at first glance. We distinguish between three primary schools of thematic analysis, which fall along a spectrum of qualitative data informed by positivist paradigms and qualitative data informed by qualitative paradigms. Reflexive thematic analysis was the analytical tool of choice because of the nature of this research study.

Reflexive thematic analysis prioritises research values and practises informed by qualitative paradigms and is often associated with research studies exploring the perceptions and experiences of the TSWs as the present study. It is located within a qualitative orientation because it highlights the organic approach to data analysis and interpretation (Campbell et al., 2021). Reflexive thematic analysis emphasises the researcher's role in conceptualising the data and the inevitable subjectivity (Byrne, 2021; Terry et al., 2017). In reflexive thematic analysis, codes are understood as the researcher's interpretation of the patterns of meanings within the dataset and can be seen as a dialogue between the interpretation and the research questions (Braun & Clarke, 2022; Byrne, 2021).

In the present study, reflexive thematic analysis is used from a constructionist perspective because it seeks to situate the investigated phenomenon within a low-resource context. The constructionist perspective in reflexive thematic analysis helps unpack how meaning and experiences are socially produced and reproduced (Braun & Clarke, 2006). It aids in theorising the sociocultural contexts and structural conditions by identifying meaning-making patterns that enable the individual's accounts (Byrne, 2021). The theoretical flexibility of reflexive thematic analysis gives the researcher space to explore a wide variety of experiential concerns and to reflect on the overlapping meanings ascribed to the phenomenon by the respondent (Clarke et al., 2015; Terry et al., 2017).

Furthermore, a predominantly inductive approach was adopted in the present study. In this case, it was important for the themes to be grounded in the data to explore the intervention's feasibility within context. Although using a pre-conceived framework would be beneficial, it

would pose several restrictions because the research study does not seek to test a hypothesis. However, deductive analysis was adopted to ensure that the themes produced were meaningful and applicable. The selected analytical tool's main idea is to emphasise the shared ideas or concepts because each TSW would be positioning the intervention from their lens and experience.

3.7.2 Data Transcription

A significant component of the qualitative data analysis process is transcribing audio-recorded data into textual format. Transcription in this study involved close engagement with the data through repeatedly listening to the interview recordings of the TSWs. Transcribing these interviews provided the first step to systematically arranging the data and familiarising myself with the data. I conducted 14 semi-structured interviews, equating to approximately ten hours' worth of audio recordings. The transcription process took place through two phases to ensure the audio recordings were accurately transcribed into textual form and to maintain the data quality.

For the first transcription phase, I developed preliminary transcripts of the interviews using Descript, an online platform that offers audio-to-text conversion. This platform facilitated transcribing by creating captions of the audio-recorded interviews that I could edit into transcripts. These transcripts were direct conversions of the audio, including the filler words and expressions, which were paramount when accounting for the respondent's inflexion and responsiveness. The transcripts were exported from Descripts as a Microsoft Word document with labels and prepared for the second transcription phase.

Lastly, the preliminary transcripts were manually revised to the final dataset to be used in the analysis process. Revising the transcripts was done to reduce the amount of data by removing filler words and repetitions. I used the preliminary transcripts and audio recordings to create the final transcripts accurately by playing back the interviews at a slower speed. Although the transcripts were reviewed and edited, I needed to maintain the dataset's quality by capturing the TSWs' responses. Once this process was completed, the textual data was ready for data analysis.

3.7.3 Analysis Procedure

Braun and Clarke (2006) use a six-phase analytical process to guide thematic analysis. This guide aids in systematically developing themes during the data analysis process, although the process itself is not linear. A systematic approach brings structure to the analysis process and helps ensure the research study's rigour.

I. Familiarisation with the data

During the initial phase, much of the familiarisation of the data took place through listening to the audio recordings of the interviews. The interview's first playback required active listening to create a primary understanding of the data. Because there were several interviews, listening to the audio beforehand helped create a coherent flow with the textual data. Once the transcription of the interviews was completed, I could read and re-read the transcripts multiple times to fully immerse myself in the data and engage with it adequately. Playing back the recordings allowed me to pick up on any delays and new insights in the dataset.

II. Generating codes

Coding requires the researcher to systematically work through the dataset, attending to each item and identifying aspects of the data that could present underlying commonalities and essential information. Codes are understood as fundamental building blocks to developing themes, and they were the first explicit connections between the TSW responses and the research questions. Coding involves assigning codes to identify important statements, experiences, and reflections.

The codes developed were short but detailed descriptive words that captured parts of the data that could have significant meaning and provided a basis to build on when forming themes. There were descriptive codes to succinctly summarise parts of the broader text and conceptual codes to reflect on meanings and make interpretations. I used the Microsoft Word comments feature to take notes electronically on the transcripts, which was used as a point of reference throughout the analysis process.

Furthermore, reflexive thematic analysis emphasises the researcher's reflexivity; taking notes on my thoughts and feelings during the analytical process was crucial. This process

involved consciously examining my subjective lens as a researcher and how it impacts the outcomes. I acknowledge how my subjective perspective is intertwined with the qualitative research process, and I strived to capture the emerging themes as fundamental truths and reflections of the data.

III. Developing initial themes

When generating themes, the focus shifted from annotating and interpreting individual data items to the entire dataset. The coded datasets were reviewed and collated under an identified central organising idea or concept. The central organising idea or concept helped clarify and formulate the themes and determine which codes from the dataset fit under a single theme. Because data is an iterative process, I began building up on the earlier engagement with the data to shape the first version of the most noticeable patterns of responses.

Developing themes was an active process of identifying and forming patterns by examining existing codes or combining them. Themes must tie together to produce a coherent picture of the dataset, even when they are contradictory to each other. An example of this is found in the responses exploring and dichotomising the barriers and facilitators of different stages of the intervention.

Table 3: *Interview Data: Generating initial codes*

Data Item	Initial codes	Emergent themes	Subordinate themes
Lilitha			
I felt like I was unequipped. [Mm-hmm] But the tools came in when I was in the session.	Significant text	Physical aids	TSW role
They've put a child to take care of such a big role	Unexperienced with big responsibility	working as TSW	Intervention utility
But if there was a counselling aspect too, I think would've helped.	There is an importance to having certain qualifications or skills		Contextual factors
(A week) Elongate (training) and add more stuff.	Training related		Impact of training
few shared (practice) sessions with maybe you guys	Refresher exercises		
People are scared to reach out.	Reluctance, fear and stigma of participating in intervention	Stigma and Fear	
James			
but just the, the sheer amount of information. [Mm-hmm] over like long periods of two days.	Training duration	Training duration	
But yeah, I actually said, maybe adding a third day	Training duration	Training duration	
it's this chance to actually take what you've learned [00:03:00] and actually help people,	Helpfulness		
Bridget			
very long in terms of like having to sit, you know, for many hours.	Training duration		
I did feel prepared	Training		
I guess I'm making it a little bit longer. Maybe having a few more, like role playing	Training and role play exercises	Training duration	
quite challenging because it took a very long time to build rapport.	Longer sessions because of difficulty building rapport and getting started with exercises	Sharing hesitancy (stigma + fear)	
more time with the participant	Takes longer for some participants to get into the gist of things	Sharing hesitancy (stigma + fear)	
So that was a bit difficult to imagine.	Leaving your client after the 8 sessions or during recess		

Note. This table contains an excerpt of the data analysis process including the textual data.

IV. Reviewing and defining potential themes

According to Terry et al. (2017), reviewing potential themes is synonymous with a quality control exercise and involves procedures that ensure the data is captured adequately. Reviewing potential themes takes considerable time for abstraction and synthesis and helps establish relatability between the data, research questions, and objectives. The process helped ensure that the generated themes painted a meaningful picture of the research study through the dataset.

Defining and naming themes is an ongoing part of the data analysis, which followed after I reviewed and selected the themes. The definition and names of themes illustrate to the reader that the data capture what the researcher has intended because they present basic answers to the research questions. Themes and sub-themes are selected because they provide the most appropriate interpretation of the data about the questions (Byrne, 2021).

During this phase, I frequently revised and reformulated themes and sub-themes because of incongruence and refined each theme's specifics to define and name it. It was important to remember that the significance of a theme was not dependent on its quantifiable measure but on whether it captures essential aspects of the research observations. I highlighted the themes I would use from the collated table, with colour-coded definitions. Lastly, I created a thematic framework with the finalised themes and sub-themes.

Table 4: *Interview Data: Reviewing and defining themes*

Emergent themes	Subordinate themes	Superordinate themes
Physical aids	Training and preparation	*Working as TSW*
Working as TSW	Exposure exercises and emotional impact	Perceptions of utility
Sharing hesitancy (stigma + fear)	Theraputic techniques and tools	Challenges and limitations
Stigma and Fear	Monitoring and reviewing TSWs	
Experiencing trauma narratives	Reflecting on PE-PC framework	
Training duration	Integrating to communnity based settings	
Support and supervision	TSWs motives	
PE-PC structure	Navigating illiteracy	
Illiteracy	Diversity and cultural sensitivity	major concerns
Culture and language	Addressing contextual issues	
Referal system		
Training duration		
PE-PC & TSW training		
Motivation for participation		

Note. This table contains an excerpt of the initial codes and final superordinate and subordinate themes.

V. Producing the Report

At this analysis stage, I drew from the table all the data items and codes, developing themes and the thematic framework to produce a report of the data. This phase of analysis overlaps with the previous phase and may seem repetitive; however, recursiveness aids in engaging with the data. Throughout the process, I consulted the original and revised transcripts regularly to select compelling extracts to substantiate my report. Planning out my report involved deciding on the order in which the themes would be reported and discussed and the subordinate themes that would encompass them.

Chapter Summary

This chapter discussed the methodology and research design used to collect and analyse the data required to address the research questions. The research study employed a qualitative design for healthcare research, drawing influence from implementation science because of the nature of the research objectives. The chapter located the research study within context while outlining some of the organisations that formed part of the project and the sample group drawn from the different populations. Notably, the chapter addressed some of the ethical considerations in qualitative research and this study specifically. Chapter 4 will unpack the research findings/results obtained from the semi-structured interviews.

Chapter 4

Research Findings

Chapter overview

The following chapter presents the findings drawn from the analytical process to answer the main research question: How do trauma support workers experience and perceive implementing PE-PC for the treatment of traumatic stress among trauma survivors from a resource-constrained context in the Eastern Cape?

Three superordinate themes were identified during the data analysis process, comprising ten sub-themes presented in the table (see Table 5.1). The themes identified from the interviews are in fulfilment of the research objectives, which seek to describe the TSW's experience of PE-PC, the TSW's perceptions of the usefulness, and the intervention's uptake in Joza location and Rhodes University.

In order to explore the feasibility of task shifting PE-PC, specific components of the implementation process were investigated from the TSWs' perspective, such as the training programme. Exemplary excerpts from the TSW interview transcripts have been used as textual evidence to substantiate the findings and present the trustworthiness of the data.

Table 5: *Superordinate Themes and Sub-Themes: Trauma Support Workers*

Superordinate Themes	Subordinate Themes	
4.1.TSW role	4.1.1	Training and preparation
	4.1.2	Exposure exercises and emotional impact
	4.1.3	Therapeutic techniques and tools
	4.1.4	Monitoring and reviewing TSWs

Superordinate Themes	Subordinate Themes	
4.2.Perceptions of utility	4.2.1	Reflecting on PE-PC framework
	4.2.2	Integrating to community based setting
	4.2.3	TSWs' motives
4.3.Challenges and limitations	4.3.1	Navigating illiteracy
	4.3.2	Diversity and cultural sensitivity
	4.3.3	Exploring intervention's reach

4.1. Superordinate theme: TSW role

Several components constitute the PE-PC implementation process, described and elaborated under the following superordinate theme. While there is a significant amount of literature on task-shifting to non-professionals, only a few have explored the experiences of lay healthcare workers, especially in mental healthcare. The following sub-themes were identified to explore what the role of a TSW entails and how the TSWs experienced it: *Training and preparation, Emotional impact and exposure exercises, Therapeutic techniques and tools, and Monitoring and reviewing TSWs*.

4.1.1 Sub-theme: Training and preparation

Under the following sub-theme, I describe how the TSWs experienced the *training and preparation* programme for the PE-PC intervention. I discuss topics such as the training duration, the impact of training on their readiness and competence and the use of patient and provider manuals. Because only a handful of studies document training non-professionals for task-shifting purposes; it is crucial to explore the TSW's experience of the training and its impact (Shahmalak et al., 2019). Training was conducted by the PI alongside, Dr Sheila Rauch, during two separate occasions for the different groups of TSWs.

Training and preparation for the student cohort was significantly shorter because it was based on the standard PE-PC training model. Meanwhile, the community members' training programme was supplemented due to their insufficient knowledge of psychology. A significant number of the TSWs from the student cohort suggested extending the training from just two days to *"maybe adding a third day,"* as emphasised by TSW 1, a female student. There was a consensus among the student cohort that the training days were intense because of the *"sheer amount of information over like long periods of two days"*, as stated by TSW 2, a male student.

Meanwhile, the TSWs from the community felt as though the six training days were too long, making it difficult to take in all the information being provided. With six days of training, the TSWs argued that fatigue hindered their learning.

Although there are a range of comments regarding the training duration, according to Shahmalak et al. (2019), training duration typically ranges from two days to months, depending on the training content. While longer training durations might balance the intensity and ease of understanding, the researcher needs to be cognizant that primary care and community-based settings do not have the resources and capacity for extended training programmes. However, the training duration must provide ample time for the TSWs to adequately understand the information because it significantly impacts their readiness to implement the intervention. As evidenced by TSW 7, a male student, he stated that *"you need that long training where you can take it step by step where everything is clearly explained".*

Providing a thorough and inclusive training programme for the TSWs is necessary as it is crucial for the successful delivery of the PE-PC intervention. Because the intervention is designed to be task-shifted into primary care settings, its training programme should include content that is comprehensible to non-professional mental healthcare workers. Providing comprehensive training increases the TSWs' confidence in their competence because they feel prepared and comfortable implementing the PE-PC intervention. Researchers must ensure that TSWs acquire the skills to perform their roles and responsibilities once training is complete successfully.

Beyond the training duration, the TSWs were questioned on their perceived readiness once training was completed and whether they felt they could competently implement PE-PC. This question was posed to explore the impact of the PE-PC training programme on the TSWs' ability to perform their roles and to find out whether they were provided sufficient information. Most of the sample group expressed satisfaction with the content and information provided during training, which adequately prepared them for implementing PE-PC. This is illustrated by comments affirming that *"I did feel prepared"*, as communicated by TSW 3, a female student. Similarly, TSW 5 of the student cohort stated that she was *"nervous but ready in that I (she) was prepared".*

In contrast, a few TSWs felt ill-equipped to transition into implementing the PE-PC intervention, even though they felt they were provided enough information. For example, TSW 1 responded, *"I felt like I was unequipped. [Mm-hmm] But the tools came in when I was in the session. [Okay]. They came naturally. [Mm-hmm]. So beforehand I was so like, no man, they made a mistake"*. Despite acknowledging they were provided sufficient information and tools to implement PE-PC, TSW 1 questioned her readiness and competence, asking whether the TSWs could be trained enough. Likewise, TSW 4 brings light to the idea that *"you never really know that you are trained enough until you are put in place, um, spot that you have to see now your skills and the skills you have gained"*.

Furthermore, factors such as the programme's structure and how the TSWs engaged with the content determined the overall experience of the training. For example, TSW 8, a female community member, highlighted the importance of the role-play exercises, *"I think the role-playing and talking about it and asking questions helps you in the actual sessions as well"*. For the TSWs, the role-play exercises were an opportunity to put the training into practice and accustom themselves to the protocols. In addition, having the provider and patient manuals was advantageous and conducive during PE-PC implementation. The provider and patient manuals were a valuable tool to the TSWs, as they helped during preparation and guided the implementation sessions:

> Interviewer: *"Did you feel you were provided enough information?"*
> TSW 6 (Female student): *"Um, but yes, definitely a lot of information provided. Um, and if I ever felt stuck, I just went back to the PowerPoint slides and I knew exactly what to do."*

Although the training provided a sufficient base for implementing PE-PC, there were multiple suggestions from the student cohort to incorporate training refresher sessions. The student cohort stated they would appreciate role-playing exercises even after training was completed. However, refresher exercises are not a new component in the research study as they were regularly incorporated for the cohort of community members. As such, a question was posed investigating whether the community cohort benefited from the refresher sessions. TSW 9 responded, *"Yes, and I would have enjoyed more refresher sessions, [yeah?] because they were very helpful"*. Because of the student's request and the existing data, moving forward, refresher exercises are a component that should be considered for all TSWs.

A common theme that emerged was the TSWs' development of new skills, including listening actively and managing their emotional well-being. The interviews noted that the TSWs equally valued the training experience, emphasising how stimulating the learning environment was. One of the TSWs highlighted the importance of the training because one could negatively affect their client if they do not have adequate training. Moreover, beyond the intervention, TSWs further reiterated how "*it also teaches you individual coping skills*", facilitated personal development and increased their efficiency as mental healthcare professionals.

With everything considered, most of the TSWs felt equipped and competently trained by the end of the programme and were prepared to begin the implementation sessions. The training programme yielded positive outcomes and positively contributed to the TSW's delivery of the PE-PC intervention and overall development as mental healthcare professionals. There was equal satisfaction with the training programme regardless of the TSWs' previous experience in mental healthcare. Nevertheless, experiential training exercises such as role play and refresher sessions are deemed necessary for TSWs to consolidate their training in PE-PC. As such, they should be kept in mind when implementing training programmes for task-shifting purposes.

This section highlights a fine line between readiness or preparedness regarding the programme content and providers' personal sense of readiness or self-efficacy. It might be necessary for researchers to be aware of this distinction and to ensure that both aspects are nurtured in training because knowing what to do and feeling confident about doing it are two different things.

4.1.2 Sub-theme: Exposure exercises and emotional impact

For this sub-theme, I will further expand on the role of a TSW by unpacking the components involved during the implementation process, which are the client's trauma narratives and exposure exercises. This sub-theme explores the emotions expressed by the TSWs regarding the experience and how they became aware of the realities of working with trauma survivors. Listening to trauma narratives was a problematic experience for the majority of the TSWs, irrespective of the age, sex or level of experience as a non-specialist health

worker. A range of responses within the two cohorts clearly shows the TSW's experiences in the role.

When the TSWs are asked to describe their role, there is typically a sigh or exhale accompanied by a visible expression of settling into the question. Many TSWs, such as TSW 2, stated, "*Now see, that was actually a question I was afraid of answering*", which we may assume is because of the multiple layers of the single question. At the surface level, the responses typically give a clue on what motivated the TSWs to volunteer in the research study because the answers speak to how the role was a chance to serve the community. Some of the TSWs described the role as "*begrudgingly fun*" or "*exciting*" because it was a chance for them to "*actually take what you have learned and help people*".

The majority of the TSWs describe how they had anticipated just being there to hold a non-judgmental space for the client to speak while they listened. As stated by TSW 10, a female community member, "*The main thing, um, was to let the client tell their story*". This, for the most part, is true, considering how PE-PC contain memory exercises where the client gives a detailed recount of their traumatic experience; however, the experience is not as straightforward. Once training is completed and TSWs experience Contact 0 of the PE-PC intervention, they become aware of the collaborative nature of the process and the importance of their contribution to the dialogue.

> Interviewer: *"And how would you describe your role as a trauma support worker?"*
> TSW 5 (Female, Student): "*I've understood that my role is very much listening and letting the person be comfortable in speaking about this, in the way that they want to speak about it, but also prompt them towards avoiding it less and being conscious of the fact that they do avoid it. But the more I do it, the more I feel like it's more of a collaborative process."*

Once the TSWs began implementing PE-PC, listening to the trauma narratives and conducting exposure exercises, they realised they had to actively engage with the client as opposed to being a passive supporter. On the same note, the TSWs stated how intimidating the experience was and that it induced anxious emotions; for example, TSW 4 expressed, "It is *quite, um, intimidating thinking that, am I trained enough?*". However, the TSWs shared the sentiment that no amount of training could prepare the TSWs to deal with the pervasiveness of

trauma and violence. This is not to say that they are unaware of the prevalence of violence and trauma in South Africa; more so, the vivid descriptions of the clients' experiences highlight how bleak the reality is.

For many TSWs, such as TSW 9, "*the memory processing exercise, you know, um can sometimes have, not a negative, but rather, um, I do not know, a burdening effect*" on them. The trauma narratives or memory processing exercise is a difficult task for both the client and the TSW involved, and it can easily consume the TSW with negative emotions. Engaging with trauma survivors continuously challenged how the TSWs viewed being in the world and prompted introspection on whether they wanted to continue working in the field of traumatic stress. For example, TSW 4 experienced the trauma narratives and exposure exercises: "*Um, it really, um, cemented the idea that I had, how PTSD affects your life generally*". Importantly, it urged them to continuously reflect on what it entails to be a mental healthcare professional working with trauma survivors.

From the above statement, we can deduce that working as a TSW is a challenging role and experiencing the trauma narratives and exposure exercises may have you feeling unprepared. For TSW 12, a female community member, it was a heavy experience, which is symbolic of the "*weight*" the TSWs have to carry concerning how emotionally overwhelming it is to engage with traumatic experiences. Although some of the TSWs have had counselling experience through Revive, a counselling service and training organisation, that had not prepared them for the difficulty of distancing themselves from the traumatic experiences. However, in order to cope with the complexity and distress of dealing with traumatic memories, the TSWs were encouraged to find a healthy separation between their work and personal lives.

According to the TSWs, the exposure exercises were somewhat of a different experience to the trauma narratives. The TSWs expressed how they were worried about their clients being in si*tuations "where there is the potential of re-experiencing the trauma*". However, with the exposure exercises, the TSWs state they could pick up on nonverbal cues, which prompted them on specific aspects of the traumatic memory that are "*quite important*". The TSWs argue that they had to pay more attention to their client's body language to ensure they were comfortable, highlighting some soft skills taught during training (Jacobs et al., 2021). TSW 7 explained that they needed to be more patient during the exposure exercises; he had to remind himself, "*You want to linger here and maybe take more time or pick another memory*".

Lastly, the TSWs revealed that as you ease into the role and develop an ability to express empathy without being emotionally attached to the client's experience. The TSWs state that their perception of working with trauma survivors changed, and they gained a new and different understanding of their role in the therapeutic relationship. Similarly, TSW 5 shared that their "*philanthropic*" personality allowed them to accept and embrace the challenges and realities of the role if it meant being able to promote the mental wellness of others. There was a shared sentiment of the inevitability of being affected by your role in trauma work but learning not to be frustrated by not being able to help clients who are not ready.

4.1.3 Sub-theme: Therapeutic techniques and tools

The benefits of using materials to aid in the delivery of task-shifted interventions have been briefly discussed by Armstrong (2003) and Shahmalak et al. (2019). These authors argue that having physical or abstract aids facilitates the delivery and implementation of the intervention, as such, under the following theme, I will explore the TSWs experience with using the PE-PC patient and provider manuals.

> Interviewer: *"So how would you say the manuals and the role play impacted the whole training session?"*
> TSW 7: "*Um, definitely beneficial. I think if you read your manual and I actually found it helpful reading the patients or the client's manual as well."*

The interviews showed that the TSWs found the PE-PC patient and provider manuals very beneficial during the training and implementation. During the training, the TSWs expressed that having the PE-PC patient and provider manuals allowed them to follow along and visualise the implementation process. The TSWs described having the manuals during training as a "*hands-on*" experience, making it easier to understand the intervention. As stated by TSW 6, "*Um, and just to actually have that (provider manual) and then, the patient's manual just to get like a proper in-depth feeling and visualisation of what actually needs to be done and what's going to be done. That helped put everything into perspective*".

Furthermore, the TSWs described how they used the PE-PC patient and provider manuals once they completed training. For example, TSWs 1 and 4 claim to have gone through

the manuals weekly during their preparation sessions together. TSW 1 elaborates that she decided against taking the manuals with her to the contact sessions "*because I am gonna get anxious*"; as such, she made it a habit to "*study*" them regularly. A similar statement was made by TSW 10, who summarised important information from the manuals into a smaller notebook and cue cards that she could carry with her and use during the PE-PC contact sessions.

> Interviewer: *"Do you think, the training manuals are beneficial during the training and throughout the implementation?"*
> TSW 3: *"Yes, I definitely think so… Um, so I definitely think they were helpful, both the patient manual and the provider manual."*

In addition to a breakdown of the PE-PC implementation process, the TSWs argued that an important aspect of the provider manuals was that it offered tips on how to implement each contact session from 0 to 8. TSW 12 elaborates on this using an example, *"let's say I'm asking questions a certain way, and maybe I'm running into a wall, but the manual might give me an idea of how to an talk or ask a question in a different way".*

In conclusion, the patient and provider manuals were a helpful and informative tool for the TSWs throughout the PE-PC training and implementation process. The TSWs described the various ways they used the manuals in preparation for their implementation sessions and how they created summary cues to guide them. Although there were concerns with the format of the patient manual, the TSWs did not have a negative experience using either the manual as a booklet or as loose exercises.

4.1.4 Sub-theme: Monitoring the TSWs

In the following theme, I reflect on the importance of *support and supervision*, as illustrated by the textual data from the TSWs' interviews. I provide the TSWs with a description of how they felt supported during the implementation of the PE-PC intervention and elaborate on the supervision structure. Given the expressed difficulty experienced with the TSW role, the TSWs highlight the need to integrate supportive avenues to help them cope with the psychological distress and negative effects.

The TSWs had weekly consultation meetings with myself, Dr Duane Booysen, and the rest of the cohort, and every second or third week, Dr Sheila Rauch would attend. These meetings were intended to keep track of the TSWs with active client cases and the ongoing PE-PC implementation. During these meetings, the TSWs presented a brief description of their active client cases, which involved looking at the client's PCL-5 and PHQ-9 scores about their client's memory exercises and discussing their progress. However, from the textual data, it was clear that the meetings provided a space safe enough for the TSWs to check in with themselves and reflect on the "*heaviness*" of engaging with traumatic memories.

> TSW 10: *"I enjoy them (weekly meetings). Especially like when other people like were sharing about their clients and, you know, just feeding off of that information".*

Consequently, the weekly consultation meetings became a time when the TSWs could reflect on their contact sessions with clients and express all the overwhelming emotions they were experiencing. The process of engaging with the client's trauma memories has a clear and significant impact on the TSWs, which forces them to adapt and be resilient. As stated by TSW 11, "*The role is fulfilling but distressing; the amount of violence, pain and trauma the clients endured pushes you also to foster your own resilience*". TSW 5 reiterates this statement, "*I also find that having a genuine support system is also a good thing*" for both the client and the TSW.

Furthermore, the TSWs stated multiple times that having supervision and a support system from fellow counsellors provided space for relatability and comfort. Throughout the PE-PC intervention, TSW 6 expressed how she felt as though "*we had formed our little trauma support community*". Because of the inherent psychological risks of working as a trauma counsellor in resource-constrained communities within ongoing trauma and violence, some of the TSWs reconsidered working in the field of PTSD. TSW 1 expressed her concern for mental healthcare professionals who do not have an immediate support system, "*I wish people could, um, like talk to people who deal with people with problems (mental illness) more. I wish we can take into account how they feel*".

As stated above, the meeting with the TSWs took place every week. For the cohort of students, the meetings took place online using the Zoom platform. The TSWs favoured meeting online because it provided them "*ease as a technologically forward generation*". Likewise, for

the TSWs who did not reside in Grahamstown, the online meetings allowed them to still attend without travelling. In contrast, the cohort of community members had in-person meetings in the psychology department. The TSWs found meeting once a week adequate, as expressed by TSW 9: "*I think the once a week was fine. Mm-hmm. Yeah. I do not think there was any issue with that*".

Lastly, the TSWs argue that the meetings benefited their PE-PC implementation pro*cess, "especially getting feedback from Dr Booysen and Sheila*". The TSWs maintain that they would keep the frequency of the meetings the same because once a week was sufficient. The TSWs claim they learnt the importance of supporting mental healthcare professionals because of how difficult the profession is.

4.2. Superordinate theme: Perceptions of utility

In the following section, I will be unpacking the TSWs perceptions of implementing the PE-PC intervention within a low resource context such as Makhanda. I draw from components such as the structure of the PE-PC intervention in relation to *navigating practical concerns.* And I discuss the utility of *integrating the PE-PC in community based settings*.

4.2.1 Sub-theme: Reflecting on PE-PC framework

This sub-theme explores the structure of the PE-PC intervention's, how it facilitates implementation and whether it is advantageous to the clients and TSWs. As discussed in *Chapter 2*, the PE-PC structure refers to how the intervention has a predetermined framework and instructions to follow for each contact session. This section discusses some of the *practical concerns* of the PE-PC framework and structure, such the eight contact sessions and the self-report assessment.

> Interviewer: *"Do you think the fact that this is so structured and almost stepwise influences the treatment itself, how you implement it and how the client receives it?"*
> TSW 6: *"I definitely do, but I think it influences it in a good way. Um, a set time every week, it gives a routine to that person. And, um, you know, especially people with mental illnesses, they kind of need routine in their life."*

In the excerpt above, TSW 6 highlights the importance of having the PE-PC structure with its homework exercises and the eight consecutive weekly sessions. She goes to explain that having the structure provided by the PE-PC intervention is important to creating routine for people with mental illnesses. Taking into account how the most prominent PTSD symptom is avoidance, the structure and routine facilitates treatment seeking behaviour and holds the client accountable to themselves. For the TSWs this structure facilitates the implementation process, because the protocol clearly stipulates the work that needs to be completed in each contact session. For example:

> TSW 10: *"I see the process. I see how it's meant to go. This is what I do at this point. After reading the memory, we go over the processing questions. After the processing questions, it's then dealing with that process and then us as well being able to guide the person".*

Similarly, TSW 9 argues that having the set structure of the PE-PC intervention helped her maintain assertiveness and stay on course. She states *"because I knew that she would probably want to off track, in the second session I made sure to, like write like notes from the manual to try and make sure that we are on track. So that really helped".* In the words of TSW 5, there is a sense of comfort with having a predetermined structure, because sometimes *"I feel like even as trauma workers (we) wouldn't know like how to lead the person to where they need to be".* This TSW brings forth an important aspect of implementing in primary care settings or at community based level, which requires structures that facilitate patient flow because of limited time and resources.

A second component of the structure the TSWs appreciate is the PTSD Checklist for DSM-5 (PCL-5) and Patient Health Questionnaire-9 (PHQ-9), that is taken at the beginning of each contact session. The TSWs state that is presents a quantifiable presentation of the clients wellbeing and symptomatology, which helps direct which aspects they would need to address during the contact session. TSW 4 argues *"I think that helped having this, like someone just directly asking them rather than it being their responsibility",* which prompts the clients to *"directly address these things".* However, some of the TSWs were worried about the reliability of having their clients self-report on their symptoms through these assessments.

Another component addressed by the TSWs was the homework memory exercises. TSW 1 argued that she sees the benefits of the *"they're (clients) writing it at home. So at least, you know, again, shorter sessions, we can see more, more PTSD patients can come in".* However, TSW 3 was concerned with the idea of giving clients loose sheets of the memory exercises. She expressed that she *"often, I wondered once or twice if my participant had actually rewrote in the memory or if they'd brought in their old paper".* The TSW expressed concern about whether her client was engaging with the trauma memory and the exposure exercises.

Furthermore, a notable amount of TSWs were concerned about the duration of the PE-PC intervention. The TSWs expressed how the 30 minutes was not enough in certain contact sessions and had taken longer to work through each item in the manual. For TSW 6, her sessions were longer than 30 minutes because *"it took a very long time to build rapport".* For many of the TSWs, the memory processing with their clients only commenced later in the contact sessions which made the assigned duration feel quite restrictive. To illustrate, TSW 1 stated *"of course you can work with them within those eight sessions, but then, what if it takes them longer than that?"*

In a country where statistics suggest that a significant amount of trauma survivors have multiple traumatic memories, the TSWs were apprehensive of how implementable the PE-PC structure is. The PE-PC intervention is structured to focus on a single, primary traumatic memory to completion before addressing other memories. For example, TSW 12 worked through two memories with her client because there was an overlap in causation and they could not *"pick and choose which memory to work on".* On a similar note, the TSWs mentioned that their clients would enquire about working on different traumatic memories during the contact sessions because of the overlap between the traumatic experiences.

Although the PE-PC intervention is structured for only 4-8 contact sessions, in the words of TSW 7 the implementation work *"does lay the groundwork for, for future things"*. This excerpt highlights how the PE-PC intervention has potential to positively impact the clients to further address their PTSD symptoms. With this in mind, the cohort of students stated they were "*very impressed with the fact that we are able to refer and that, um, I like the fact that there are structures in place*"; however, they recognise that it might not translate to the public healthcare system. This statement is in reference to how the PE-PC intervention has

been structured in a manner that allows the TSWs to seamlessly refer their clients to specialty mental healthcare when requested.

Lastly, the statements in favour of the structure of the PE-PC intervention highlight how *"it was very easy to, to implement"*. The TSWs raised some areas of concern which will be discussed further.

4.2.2 Sub-theme: Integrating PE-PC into community based settings

The sub-theme, *integrating PE-PC into community based settings* explores how the TSWs perceive the utility of implementing the PE-PC intervention within a community based or primary care setting. I describe the evidence provided by the textual data of the intervention's utility from the TSWs perspective, within their specific context.

With majority of the South African population using the public healthcare system, the plausible solution to providing trauma-focused treatment would be through integrating mental healthcare into primary care and community based settings. Accounting for the inadequate mental healthcare system, TSW 8 argued *"the whole idea of the, the primary intervention is just, it's so needed, especially in South Africa", "I wish it would be a little bit more steamrolled"*. Primary care interventions are typically catered for the resource constraints, which means they are a platform to expand evidence based interventions (EBI), without advanced training programmes and extensive resources.

The TSWs state that implementing the intervention in primary care settings provided avenues that carry less stigma and attract persons from a range of social and economic backgrounds. From the experience of TSW 10, working in the primary care clinics, provided the clients a space for curiosity, in the sense that they could go enquire about the intervention without judgement. She states that the patients would approach her after their doctors appointment enquiring more information about PTSD symptoms and the intervention. Although it was not true for everyone, the single encounter with the clients would open them up to seeking mental healthcare even beyond PTSD.

As noted by TSW 1, *"people are scared to reach out"*, therefore, integrating trauma focused treatment into primary care settings meets patients halfway since they are already

showing up with other health concerns. Because the cohort of TSWs from the community worked predominantly in primary care clinics, they experienced how the patient flow varies in different settings. The rate of acceptability and utility increase in primary care settings, one of the reasons being the fact that *"the patients assume the intervention is an extension of the services provided"* as brought forth by TSW 13. This statement brings forth the idea that general mental healthcare treatment is viewed as part of the broader healthcare system, making it more acceptable.

Although there are positive comments concerning implementing the PE-PC intervention into primary care and community based services, there are some considerations to be noted. The TSWs have raised issues regarding the ever present lack of human resources within the public healthcare system and wondered how supervision of non-professionals would take place. In the words of TSW 7, *"one of the biggest things is maybe not the programs (PE-PC intervention) issue, it's just like the state that South Africa might be in"*. This TSW's comment brings forth the inadequacy of the South African healthcare system, alongside things like poverty, violence and stigma around mental illness.

To illustrate, the cohort of students were concerned about the idea of their clients leaving the university space where they are allowed mental healthcare and an *"outlet" "separate the trauma from the actual violence"*. The TSWs further argued that implementing the PE-PC intervention within the university would not be as difficult because the space facilitates open-mindedness. The TSWs presuppose having organisations such as the Rhodes Counselling Centre that openly advocate for mental wellbeing, positively impacts the students perspective of mental health. Arguably, the student cohort were implementing the PE-PC intervention from a *"point of privilege"*.

In comparison, the TSWs from the community expressed how the community members understood mental health from a different point of view. The TSWs repeatedly stated how implementing the PE-PC intervention in the community opened their eyes to how many members of the community were unaware of the effects of trauma. According to the TSWs, they cannot begin treating or referring the clients to the intervention without psychoeducation because they are uninformed or misinformed about trauma and PTSD. Beyond this, some of the TSWs struggled to find venues to conduct their contact sessions and could not completely establish the PE-PC intervention.

Despite the benefits of the implementing the PE-PC intervention at a community based setting, data suggests there are challenges and concerns to pay attention to. With this in mind, the above section probes questions on the utility and implementation of the PE-PC intervention in different community based settings.

4.2.3 Sub-theme: TSW's motivations

In the following theme, I discuss what motivated the TSWs to participate in the research study and the reasons they would recommend the intervention. The motivation for participation will help understand how they perceive the usefulness of the PE-PC intervention in a low resource context.

> TSW 6: *"Um, well, first of all, I would like to say I, I very much, um, am for this primary care level intervention".*

Some of the TSWs volunteered because of an interest in mental healthcare. While the others volunteered because they are trauma survivors themselves or know someone who had experienced a traumatic event. However, there was a general consensus on how the TSW role significantly changed how they perceive mental health and healthcare. As stated by TSW 7, *"(mental healthcare) it's pivotal".* And though the TSWs acknowledge how bleak it may be implementing the PE-PC intervention in high trauma and violence prevalence, they fully support the idea of expanding to wider the population. To further illustrate, TSW 5 commented *"I really believe that this could be something that could be helpful, especially in a South African context".*

Having worked at a community based level, the TSWs argue they witnessed the wide variation of availability in services and resources within the South African mental healthcare. The TSWs stated that being aware of how underinvested the mental healthcare system is, has highlighted the importance of primary care interventions, such as the present study. A few TSWs stated that they believe *"this is going to potentially help",* and *"you could find a snowball effect just because of like, I mean the interaction between communities".* For TSW 7, the PE-PC intervention was an important stride towards transformation, even though it seemed insignificant at the moment. TSW 7 further argues:

"You can't solve someone's problems in one day… As much as you want to maybe like potentially speed up that process or stuff, it doesn't really work like that. And the same can be said about the healthcare system".

Furthermore, the TSWs stated how their clients expressed that they were not taught to be *"comfortable with being vulnerable"* but appreciated the intervention because *"it's like a platform for people to literally unlearn and learn many things".* From the data, the TSWs were motivated to continue participating in the intervention because of the visible change they witnessed taking place in people's lives. Despite the challenges and difficulties, the TSWs drew motivation from their clients improvements and their overall perception of the PE-PC intervention's utility. For example, TSW 8 stated she recommends participation because *"even just going from one session, having someone to talk to just means so much to these, these clients".*

TSW 8: *"I understand that we can't help anyone and understand that not everyone is really ready to face the problems, but at least giving them the opportunities and the options"*

The excerpt above reiterates the idea by TSW 10, that having interventions such as the present study in primary care or community based settings will allow people space to be curious and seek help for their mental health. The TSWs agree that implementing the PE-PC intervention may not be easy and people may not be receptive to it instantly, but *"people need to know it exists."* Majority of the TSWs are motivated to continuing participating in the PE-PC intervention because they want to see how much further it can be disseminated and implemented. TSW 6, a TSW within Rhodes University state *"Um, so I mean, like, even the older generations, um, educate them as well."*

Although there were some shortfalls regarding the amount of active and completed contact cases, the TSWs argue that the psychoeducation workshops and community outreach widened the reach and spread of the PE-PC intervention. As such, the TSWs suggest incorporating such programmes into the PE-PC intervention within Rhodes University. TSW 6 commented that the TSWs should *"do simple PowerPoints and hand out little brochures"* in attempt to increase the uptake and implementation. The TSWs who participated in the

promotional work and community outreach stated that clients approached them with curiosity and interest, but expressed reluctance because of fear and judgement.

Ultimately, the above section discussed some of the reasons the TSWs highly recommend expanding the dissemination and implementation of the PE-PC intervention. The section also explored the TSWs perception of the utility of the PE-PC intervention in relation to how that motivated their continued participation.

4.3. Superordinate theme: Challenges and limitations

Under the following theme, I will explore some of the barriers and facilitators influencing uptake in a resource constrained context such as Makhanda. It is important to note that each sub-theme produced from the textual data is context specific and determined by a range of social factors such as poverty, availability of resources and services, stigma, among others. These social factors emphasise the importance of collaborating with community members when translating evidence based interventions into practice. These themes draw from the TSWs interviews include *lack of education, communication and comprehension, and addressing contextual issues.*

4.3.1 Sub-theme: Navigating illiteracy

The following section describes illiteracy as experienced by the TSWs during the implementation and dissemination of PE-PC. Illiteracy was mentioned in reference to the general literacy levels in the South African context, and in relation to their knowledge on mental healthcare.

> TSW 3: *"like our literacy levels, majority of the people in this country can't read or write. Um, and I, I found it weird that they want to implement something that involves literacy."*

In the above excerpt, TSW 3 highlights the low literacy levels in South Africa to raise her concerns on how the interventions written narrative structure might impact client's treatment process. Looking at the structure of the PE-PC intervention, a significant amount of it requires that clients be able to read and write in whichever language they are comfortable.

As such, the population of South Africans that are illiterate will be impacted by this reality. Beyond the writing the trauma memory exercise, she comments on the fact that some clients will not comprehensively understand the content in order to complete the self-report PTSD measures, such as the PCL-5 and PHQ-9.

Similarly, mental health illiteracy can pose challenges to the dissemination and implementation of PE-PC and any other intervention. When people do not understand mental illness and unaware of their symptoms, it influences their decision making, in relation to their mental health. As such, it is essential that interventions such as the present study, incorporate ways to educate communities about mental health and care. From these excerpts, it is clearly illustrated that progress will be hindered if the mental health literacy level do not increase; however, it is equally important to considered the populations general literacy levels in such interventions.

TSW 6: "*my mom is all traditional Afrikaans, so she doesn't really understand what mental health is".*

TSW 12: *"abantu abayazi iPTSD" (people do not know what PTSD is)*

The above mentioned TSWs expressed concern with the mental health literacy levels of the South African population. TSW 6 expressed how her mother does not understand what mental health is, to the extent of being misinformed about her career as a psychology student. Likewise TSW 12 stated people do not know what trauma and PTSD are and as such are unable to accurately understand their symptoms of post-traumatic stress and other mental distress. She argues that their lack of knowledge on the maladaptive nature of the symptoms and the fact that there is ongoing trauma and violence makes their experiences a normal occurrence. Like TSW 7 commented, *"I think it becomes normal, you know, when you go through trauma, the same thing. It's normal. It's like a baseline".*

TSW 7: *"mental health literacy, maybe we need to focus on that quite a bit"*

TSW 1: *"And I really do think, um, that a lot more people need to be aware of, you know, the mental illnesses"*

According to the TSWs, there is a urgent need to increase mental health awareness by creating programmes that will educate the South African population. The cohort of TSWs implementing the PE-PC within the community, applauded the impact of incorporating psychoeducation workshops and community outreaches into the following intervention. From the TSWs experience, the psychoeducation workshops and community outreaches created a ripple effect within the community wherein clients encouraged other trauma survivors to seek help. As a trauma survivor TSW 13 stated she had normalised her PTSD symptoms unaware of the effects they had on her functioning, but the acquired knowledge helped her want to *"take her power and life back".*

In conclusion, the above section illustrates how social factors such as the community's illiteracy and mental health literacy can impact the implementation and uptake of the PE-PC intervention. Even though the PE-PC intervention accommodates illiterate by allowing clients to audio record their trauma memories, the TSWs argued the clients were not technologically well informed or proficient enough to use tape recorders.

4.3.2 Sub-theme: Diversity and cultural sensitivity

In the *diversity and cultural sensitivity* sub-theme, I explore some of the concerns raised by the TSWs regarding how multicultural and diverse the South African population is. I discuss the ways in which language plays role in the utility and implementation of the PE-PC intervention and explore some of the suggestions to ensuring cultural sensitivity.

In a multicultural context, such as Makhanda, language plays a significant role in the feasibility of the PE-PC intervention because it has several functions. For many South Africans, language is connected to their identity and their culture, but it is also used as a tool to communicate. For starters, language can be a contextual barrier since the population in Makhanda is predominantly Xhosa speaking and the PE-PC intervention is conducted in English. For some of the TSWs, the immediate solution was translating the PE-PC intervention into the languages spoken in that particular community. Although that is a viable solution, it fails to account for language as discourse which I will elaborate on in *Chapter 6: Discussion*.

In a similar manner, TSW 1 highlights how culturally diverse context present *"huge cultural barriers, and kind of old mindsets"* which to some degree have created a language that

disregards mental healthcare. This language consists of belief systems that can be linked back to mental health illiteracy and are widely spread regardless of age, race, or sex. As such, even though translating the PE-PC intervention might be a progressive step, the TSWs caution that much more work is required to accommodate different languages. For example, the TSWs agreed that being culturally sensitive requires TSWs that are well versed about the language and culture within context.

> TSW 6: *"And don't just do it in English because. Majority of the time, those people aren't English speaking. Um, have it in Xhosa, have it in English, and then I would also translate it into Afrikaans."*

TSW 12 emphasises the need to translate the PE-PC intervention to more languages because she had an Afrikaans speaking client who was not English literate. The TSW expressed how communication between her and the client was difficult because of the language barrier, as such she was unable to give them sufficient information about the PE-PC intervention and had to refer them to someone else. The TSWs further argued that having a language barrier limits the client's ability to fully express themselves and articulate their experiences. For example, the TSWs noted that language impacts the memory processing and exposure exercises because information might be lost in translation.

Furthermore, because the community cohort of TSWs had patient and provider manuals that were translated into isiXhosa, it may be argued that they had an understanding on the impact of language. The TSWs were vocal about the benefits of having the isiXhosa manuals with them; however, majority preferred using the English manuals because "*it (English) came easily to them".* The TSWs stated having manuals in both English and isiXhosa was a facilitator when working with clients that were a little older or did not speak or understand English. And because the PE-PC intervention has a predetermined framework, manoeuvring between the English and isiXhosa manuals was easy.

In addition, the TSWs noted the overlap in the way language, culture and belief systems impact how communities viewed and accepted mental healthcare. For example, TSW 9 had an elderly Xhosa man who refused to complete the memory exercises because the client repeatedly argued that his belief systems did not align with the *"oversharing"* required from the PE-PC intervention. This statement ties into a comment by TSW 4 on the challenge of implementing

the PE-PC intervention, *"because maybe not everyone grew up in an environment where they could easily share their, um, feelings or besides that, maybe mental health wasn't like a thing spoken about".* In such circumstances, the TSW would have to carefully probe the client without stirring negative emotions.

Ultimately, the above evidence illustrates how language impacts the feasibility and implementation of the PE-PC intervention. Language and cultural diversity brings forth significant nuances, such as local dialect and so forth.

4.3.3 Sub-theme: Exploring intervention's reach

Under the following theme, I explore some of the major concerns and contextual factors that influenced the implementation of the PE-PC intervention. I also discuss the TSWs suggestions on how to improve the community's reach to the PE-PC intervention.

> Interviewer: *"How would you, um, describe the overall uptake of the intervention in the university"*
> TSW 8: *"Um, so this is a difficult question because, it's a relatively new intervention, so I feel that just having patients in general that were interested in to the fact where all of us, at least at one point, had a client that is quite a positive uptake."*

The excerpt above illustrates some likelihood of uptake and reach of the PE-PC intervention within the student population. Uptake is used to refer to the extent to which the target population came into contact with the PE-PC intervention. TSW 2 reiterates a similar statement, *"you can go from the two perspectives that, you know, we haven't helped enough people. Or you can… look at the people we actually have helped"*. Although a small number of clients participated in the PE-PC intervention to completion, the number of people who reached out for treatment indicate that the PE-PC intervention has been widely received.

With this in mind, the TSWs noted low treatment seeking and completion which they presumed was due to multiple reasons, such as stigma and sharing hesitancy, to name a few. TSW 4 commented *"one of the major ones (barriers) would still kind of be the massive stigma attached to mental health (illness)".* TSW 10 reported that a client she met during the community outreach explained how she did not want her family or neighbours knowing about

her seeking help for her traumatic experience. Mental health in South Africa remains a discomforting topic that many are unable to talk about even with those closest to them.

> TSW 7, a male student: *"There's a problem and we know for a fact…I don't know if you could call it a stigma. But there's like fear, whether it's judgment or personal fear of addressing these kind of things is it's there."*

In addition, another barrier to treatment seeking relates to complexities caused by social and systemic factors. TSW 10: *"for some people, they cannot come to the contact sessions because they have work or transport issues, some have children or are caretakers".* This statement is an example of the WHO (2022) notion that people with mental health issues need support beyond the clinical treatment because mental health is multisectoral. For the students on campus, TSW 8 argued *"I think just from what I experienced this year, university can become a lot, like, there's just a lot that's going on and I think sometimes it's difficult to actually take the time for yourself in general."*

Although there were some shortfalls regarding the amount of active and completed contact cases, the TSWs argue that the psychoeducation workshops and community outreach widened the reach and spread of the PE-PC intervention. As such, the TSWs suggest incorporating such programmes into the PE-PC intervention within Rhodes University. TSW 6 commented that the TSWs should *"do simple PowerPoints and hand out little brochures"* in attempt to increase the uptake and implementation. The TSWs who participated in the promotional work and community outreach stated that clients approached them with curiosity and interest, but expressed reluctance because of fear and judgement.

Lastly, there are several factors that stop people from seeking help for mental health issues including low levels of health literacy in mental health, stigma and discrimination, and community and structural factors (WHO, 2022).

Chapter Summary

The focus of the chapter discussed the findings obtained during the interviews with the TSWs. The data discussed highlights how the TSWs experienced the role and how they

perceived the usefulness of the PE-PC intervention. The data further discussed some of the barriers and facilitators of implementing the PE-PC intervention in a low-resourced context such as Makhanda from the TSWs point of view. The chapter addressed some of the challenges faced by the TSWs throughout the implementation process, but also the sense of rewards that comes with helping trauma survivors. Chapter 5 will be an in depth discussion of the findings from the TSWs interviews.

Chapter 5

Discussion

Chapter overview

The central research question aims to investigate the feasibility of task-shifting PE-PC within a low-resourced context in the Eastern Cape. The findings from the present contribute significantly to this area of research by exploring task shifting through the TSWs' experiences of the PE-PC intervention. In addition, it demonstrates how to feasibly implement an innovation recommended by the WHO to increase and expand mental healthcare to low-resourced contexts, such as Makhanda, Eastern Cape.

In this chapter, I discuss the TSW's experiences and perceptions of fundamental components of the PE-PC intervention, including training and its impact, the TSW's experiences of the trauma narratives, the TSW's perception of the structure of the PE-PC intervention and some of the significant concerns that influence the uptake of the intervention This chapter interprets and elaborates on the research findings drawn from the semi-structured interviews, in attempt to critically evaluate the present study's feasibility.

5.1 TSW role

Qualitative studies on task-shifting approaches for mental health have shown that lay healthcare workers can effectively deliver psychological treatments through extensive training (Darnell et al., 2019). However, only a few studies have been conducted on the lay worker's experiences of task shifting as an intervention. Within LMIC, task-shifting interventions are typically associated with lay health workers performing overstretched roles, which result in unethical practices; as such, it is crucial to explore the experiences of the TSWs to ensure that the PE-PC intervention can be appropriately scaled up.

Firstly, the sub-ordinate theme *training and preparation* discusses the importance of the training programme in determining the success rate for the delivery and implementation of the PE-PC intervention (Jacobs et al., 2021). For implementation to be successful, TSWs need comprehensive skills-based training, including content on more nuanced skills, such as forming therapeutic relationships with clients and peers, and a comprehensive understanding of PTSD

and PE-PC. Beyond training TSWs to adequately implement the PE-PC intervention, training often has several positive benefits, including interpersonal development and the reduction of onsite supervision.

Several components impact the duration of training, including how complex the implemented intervention is, because training should ensure that TSWs can competently implement the PE-PC intervention, perform their roles as TSWs and follow both treatment manuals. In addition, the training programme included basic counselling skills, which focused on active listening, empathetic responding, reflecting and paraphrasing, and using questions. Importantly, TSWs emphasised that having an extensive training programme where the content and intervention are comprehensively explained is crucial, even though it may result in longer training durations.

The training content consisted of lecture presentations, video demonstrations and supervised role-play practice exercises of each component of the PE-PC intervention with their peers. Experiential learning activities, such as the role-play exercises, played a crucial role in consolidating the TSW's learning because they provided a hands-on training experience and allowed the TSWs to reflect on the experience. For this reason, the TSWs suggested incorporating review and refresher sessions throughout the implementation process to reacquaint them with the knowledge they had learned and practice to improve their skills.

Furthermore, current literature needs to provide a definite duration for the training of lay healthcare workers; however, Shahmalak et al. (2019) state that training programmes commonly occur between two days and a few months. For example, Rossouw et al. (2018) trained non-specialist health workers (NSHWs) to successfully task shift PE and supportive counselling for adolescents in a randomised control trial. As such, the TSWs unanimously agreed that 3 or 4 days would effectively accommodate the intervention's content without resulting in fatigue.

Although longer durations of the PE-PC training were advised, researchers need to be mindful of how the programme will translate to primary care and community-based settings. Primary care and community-based settings may be unable to conduct lengthy training programmes for several reasons, including lack of space and systemic challenges. Maintaining the PE-PC intervention's fundamental brief design is essential to ensure that the duration of the

training programme aligns with that notion and that the content is effectively condensed. Understanding the nature of the broader context will aid in preparing for some of the existing barriers and limitations.

One of the essential components for delivering and implementing the PE-PC intervention is the *patient and provider manuals*, which include self-report assessments. Even though contact sessions one to eight are identical, the TSWs must have gone through the manuals to understand and implement what is expected from them. The TSWs argued that the manuals helped them understand the intervention and how to aid their client in systematically processing their emotions. Having a clear understanding of the intervention is important because the knowledge and use of EBI, such as PE-PC, in low-resourced communities such as Makhanda is limited, resulting in clients questioning the feasibility of the intervention.

Additionally, the TSWs' *encountering the trauma narratives* and *exposure exercises* supports existing findings which discuss the complexity of listening to graphic descriptions of traumatic events (Hembre et al., 2003). Even though the TSWs expressed satisfaction with the training programme, they felt naïve and unprepared for their role because it was often emotionally overwhelming. Based on the textual data, the role challenged the TSWs' resilience and ability to adapt to the nature of trauma work in order to extend compassion and support to their clients. The TSWs argued that it was only through experience and personal development that they could responsibly perform their role.

Moreover, the TSW expressed how working in the area of trauma and traumatic stress was inherently complex because it sensitised them to the pervasiveness and effects of violence and threat. Controversially, the full horror of the danger and effects of trauma and traumatic stress are only realised when one works directly with the victims and survivors. A significant number of TSWs argued that working with the trauma survivors made them realise the painful and challenging reality of the violence and threat in South Africa. However, having support and supervision facilitated carrying out the role.

For the lay healthcare workers in Shahmalak et al. (2019), support and supervision involved onsite supervision and being accompanied by the specialist during contact sessions. On the contrary, for the TSWs in the present study, supervision took place through face-to-face or online weekly meetings. The meetings aimed to manage and coordinate the TSWs' cases,

including their clients' PCL-5 and PHQ-9 forms, to address their contact sessions, and to attend any enquiries regarding the implementation process. Because lay healthcare workers may need more knowledge on delivering the intervention, supervision and support in any form is crucial to ensure success.

During the interview session, the TSWs expressed how they were satisfied with the frequency of the meetings, which was once a week. The TSWs further argued that the frequency fit well into their schedule and allowed them to gather their thoughts concerning contact sessions with their clients adequately. In addition, the TSWs were not open to the idea of onsite supervision during their contact sessions for several reasons, including the fact that they would not be comfortable being observed. Contrary to Shahmalak et al. (2019), the TSWs hoped that having supervision during their contact sessions would increase their credibility with their clients.

Existing literature has found negative and positive responses regarding the experiences of trauma counsellors task-shifting PTSD interventions. However, ensuring that TSWs understand their role and responsibilities facilitates the experience and prepares the TSWs for some of the inherent challenges within the area of traumatic stress. Lastly, the findings under the superordinate theme, TSW role, unpack and discuss some of the components involved in the experience. Moreover, it contributes to the few qualitative studies exploring lay healthcare workers' experiences in task-shifting interventions in primary care and community-based settings.

5.2 Perceptions of utility

According to Ogbeide et al. (2021), growing evidence suggests a robust connection between PTSD and the frequent use of healthcare services substantiating PE-PC implementation in primary care settings. However, because standard interventions cannot be delivered in 'faster-paced' settings, this calls for the innovative adaptation of treatments, such as condensing the principal components (Rauch et al., 2012). Under the theme of *PE-PC structure*, I explore the predetermined framework used to implement the PE-PC intervention. The theme discusses components of the adapted intervention, such as self-report assessments, for use in primary care or community-based settings, as in the present study.

The PE-PC intervention comprises four to eight contact sessions that are 30 minutes long as opposed to the standard PE intervention, which has 90 minutes of eight to fifteen sessions. Having a brief intervention is beneficial to alleviate the existing backlog in treatment provision within the South African healthcare system, as argued by the TSWs. Because community-based settings typically have an overburdened patient flow, the contact sessions have to be brief enough for TSWs to care for more clients without reducing the intervention's effectiveness.

Although some TSWs were apprehensive about the duration of the PE-PC intervention and argued that it was limiting, there was solace in the fact that specialised care was available for those clients who needed it. For example, because the PE-PC intervention is a brief version, its framework incorporates a running referral system to speciality care for clients needing the standard PE intervention. There was an existing referral system to the psychology clinic at Rhodes University and the Counselling Hub in ADC for clients who needed psychotherapy or different treatment. A referral system is a crucial element in integrating mental healthcare into communities that have low mental literacy.

Furthermore, the TSWs perceive having a structured protocol for each contact session as helpful in creating a routine. Understanding that one of the primary symptoms is avoidance puts into perspective why creating a routine for treatment is essential and beneficial to the client. In addition to the weekly contact sessions, the TSWs stated that assigning homework exposure exercises was helpful in firmly establishing the client's emotional processing and accountability for treatment seeking. Similarly, the data suggests that having clear guidelines for each contact session helps maintain the direction of the therapeutic process. Because of the overwhelming nature of working with trauma survivors, the TSWs expressed how helpful the structure and guidelines are to delivering and implementing PE-PC.

The TSWs acknowledge some advantages of using self-report assessments in task-shifted and community-based intervention, such as the practicality of administering the assessments. The TSWs also claimed that the self-report assessments aid in raising their client's subjective awareness because of having to report on their symptoms and emotional well-being. There were, however, a few concerns regarding the self-report assessments: the PCL-5 and PHQ-9. Some of the TSWs raised a concern about the reliability of the self-report assessments.

The TSWs argued that some clients may lack the insight to efficiently report their symptoms, which may result in the exaggeration or masking of their PTSD altogether.

In addition, the *community-based care* sub-ordinate theme focuses on the PE-PC intervention's utility in context. The perceived usefulness of the PE-PC intervention in a community-based setting is multi-dimensional. Firstly, implementing the intervention in a community-based setting exposes it to an existing patient flow looking for different services. For example, the clients in primary care clinics would come to the clinics to report on other health-related ailments and get introduced to the PE-PC intervention. The TSWs argued that the clients were provided with a space for curiosity and to enquire about PTSD, trauma and their own experiences because the settings are perceived as less stigmatising.

In the same light, the TSWs argued that implementing in a primary care or community-based setting presents the PE-PC intervention as an extension of the services provided. Because of the acceptability and decrease in stigma and fear of judgment, the community base provides an ideal avenue to expand mental healthcare, especially trauma-related treatment. In addition, the TSWs argued for expanding this approach because it offers reach to quality trauma-focused treatment and significantly raises awareness of mental health and disorders. As stated by Sibeko et al. (2018), community-based interventions potentiate improvement in the knowledge base for TSWs and the overall community and positive changes in the attitude and perceived societal stigma.

Regrettably, services in community-based interventions remain limited for various reasons, including a lack of facilities and slow reform of existing mental healthcare (Anakwenze, 2022). The TSWs presuppose that having existing mental healthcare-related organisations positively impacts the community's perception of PTSD and advocates for treatment. In addition, there remains an inequitable distribution of human and other resources in LMICs, and it is essential to note that the contexts within which these constraints take place are unique to communities and should not be looked at in isolation (Wakida et al., 2019). For example, the TSWs working in primary care clinics and ADC experienced difficulty accessing venues and facilities to implement the PE-PC intervention, which they perceived as a barrier.

Although there are complexity and noteworthy barriers in implementing the PE-PC intervention in a community-based setting, the abovementioned strides towards progression

fulfil the TSW's role. The TSWs reiterated how the PE-PC intervention positively changed how they perceive PTSD and mental health because it challenged them to unlearn some of their ideas about the healthcare system. The textual data demonstrates how the TSWs described being inspired by their clients' resilience and strength, as discussed under the *TSWs' motivations* sub-ordinate theme. The WHO (2022) argues that a motivated and competent workforce is crucial to a well-functioning intervention system.

Ultimately, applying Javadi et al. (2017) notion of systems thinking to analyse community-based interventions brings to light the system-wide impact of such interventions, and, importantly, it highlights how such interventions should not be analysed in isolation. Accumulated evidence shows several factors influencing how lay healthcare workers perceive the implemented intervention.

5.3 Challenges and limitations

Addressing implementation barriers begins with the research design and continues during implementation. Throughout the implementation process, barriers should be evaluated continuously and addressed to identify the resources required for the proposed solutions (National Institute for Health and Clinical Excellence (NICE), 2007). Continued efforts in allocating and coordinating resources were crucial to mitigating implementation barriers and successfully implementing the PE-PC intervention. Despite the solid evidence base for disseminating and implementing the PE-PC intervention, there are limitations within social and systemic structures in LMIC (Booysen & Kagee, 2020; Celik et al., 2008).

For illustration purposes, the research study employed the necessary steps to implement PE-PC in Makhanda effectively; however, the outcomes needed to be translated accordingly. As the initial phase of the implementation process progressed, some obvious barriers and inequalities needed to be accounted for. As a result of low treatment-seeking behaviour from the community, low client flow became the research study's main implementation barrier. The intervention's implementation stopped abruptly because of insufficient client flow into the research. Exploring the intervention's reach, the subordinate theme discusses contextual factors affecting reach and potential solutions.

The initial response to the low treatment-seeking behaviour was expanding the existing campaign and advertisement to increase the intervention's reach by distributing pamphlets and posters. The research study's deliverables were reframed to incorporate a mental health promotion campaign to solve the barrier. Mental health promotion is built on assumptions linked to contemporary views of mental healthcare that create a paradigm shift into social inclusion and stigma reduction (Cresswell-Smith et al., 2021). The first initiative took place in collaboration with Joza Clinic on their health promotion day; along with the TSWs, a campaign plan was set to raise awareness of the trauma-focused services provided at different sites.

In synthesising literature and discussing with the TSWs, I soon learned how the population's illiteracy impacted their treatment-seeking. The subordinate theme of navigating illiteracy explores the South African population's low literacy levels and the potential consequences. Literacy in this context is first applied as the general ability to read and write in whichever language the person is fluent. Low literacy levels may significantly affect the client's ability to complete written memory exercises and self-report assessments comprehensively. This may be linked to a statement by a TSW arguing that the community may have been apprehensive to participate because of illiteracy.

Ongoing efforts to respond and address the barriers were adopted; however, the community's uptake of the intervention could have been faster. While the mental health promotion was helping expand reach, it also brought to perspective the glaring truth of the underlying systemic problems (Castillo et al., 2019). The TSWs speculated that the community did not fully understand PE-PC as an intervention and had sparse comprehension of PTSD and trauma. This meant that some parts of the delay in implementation resulted from mental health illiteracy. As such, the intervention would reach a dead end until the community was able to recognise the signs and symptoms of PTSD in order to seek appropriate treatment.

Likewise, literacy was further conceptualised concerning mental health. Jorm's (2019) concept of mental health literacy encompasses multiple components, including the public knowledge and ability to recognise mental health disorders and their treatment options. Literature states that contextual explanations of the aetiology of mental disorders may hinder or prevent persons from seeking help. Moreover, this widespread treatment delay is further shaped by how mental health care providers conceptualise, understand and explain mental disorders and the prevailing presence of stigma.

According to Anakwenze (2022), there tends to be a crucial difference in people's conception of mental disorders that might be founded in psychosocial, wherein stereotyping and labelling can have a disastrous impact. In creating a space for psychoeducation, the community could enquire about their symptoms to inform their treatment-seeking behaviours and get clarity on the causative beliefs relating to PTSD. Beyond providing trauma-focused treatment, integrating the PE-PC intervention within community-based settings helped address negative attitudes and beliefs concerning mental disorders by providing accurate information.

Furthermore, regarding the sub-ordinate theme of diversity and cultural sensitivity, the TSWs discuss the importance of translating the PE-PC intervention into the languages predominantly spoken within the context. Translating the PE-PC intervention acknowledges the diverse groups within the South African context and facilitates treatment seeking and provision. While diversity typically relates to race and ethnicity, it is not limited to that and may include gender, language, and social class. Language within the South African context is dynamic and has several functions; it is not limited to race but carries cultural connotations and is a tool for communication.

Most of the TSWs advocated for translating the PE-PC intervention, with some expressing how relieved their clients were to articulate themselves in their home language. However, it is crucial to recognise that translation alone is inadequate for progressive transformation. Matoane (2012) argued that it is imperative to sufficiently understand the local people to interpret the community's use of normalising dialect. For example, the community cohort of TSWs had manuals translated into isiXhosa, but the majority preferred using the English versions because of comfort and ease. Even though the TSWs could easily code-switch between languages.

It is perplexing that even with evidence of high prevalence, mental health literacy and knowledge remain low (Kometsi et al., 2020). In short, the main implementation barrier faced by the research study was low treatment-seeking behaviour from the clients, which impacted the TSWs' ability to implement PE-PC. However, there were a few other contextual factors to consider when implementing in contexts similar to the Eastern Cape, such as language.

5.4 Recommendations

In complete agreement, the TSWs deemed the intervention feasible as a pilot project and did not have explicit changes they would make; however, a few changes mentioned throughout Chapter 4: Research Findings are worth noting.

The TSWs recommended diversifying the group to cater to more languages besides English and isiXhosa. Although the study was conducted in a predominantly Xhosa-speaking community, as mentioned previously, Makhanda is culturally diverse. This notion was highlighted within the Rhodes University space because it comprises students from a broader cultural base. Because PE-PC relies on the client's ability to articulate and express themselves, the TSWs highlighted the importance of having a diverse group.

In addition, the TSWs recommended merging the two cohorts where possible, including scheduling community members with university clients and vice versa. The TSWs argue that doing this would provide a different perspective to the intervention, allowing them to have a more informed experience. Importantly, it would blur the division created by the two locations which give the impression that the project consists of two separate interventions.

Chapter Summary

The chapter above described, analysed and interpreted the present study's research findings. The discussion chapter aimed to explore the meanings and significance of the findings in relation to the research objectives. The chapter provided logical explanations of the research findings analysed in *Chapter 5*, which lays the foundation for *Chapter 6*, which contains the conclusion. The chapter's findings support PE-PC's implementability through task-shifting within a few contextual limitations.

Chapter 6

Limitations, Implications and Conclusion

6.1 Limitations of the study

Because qualitative research does not necessarily seek to generalise to the broader population, the sample group was kept small and homogenous. In qualitative research generalisability is used to compare the findings with findings from similar situations. However, the study's generalisability is limited due to sample size, TSWs' characteristics, and location, as it does not represent persons in different socio-economic contexts it is not absolute.

Furthermore, there may have been some variability in the TSWs' experience performing their role due to the difference in their education levels and counselling experience. Although the difference in training duration and content was justified, there is a risk of variability. However, understanding complex phenomena in intervention implementation can be enhanced by analysing them from diverse perspectives. Moreover, it is essential to note that the quality of the PE-PC training was never compromised because a standardised training manual had been used.

Due to the nature of the study and the role performed by the TSWs, there is a slight risk of attrition. Although attrition is commonly seen in longitudinal studies, there is a risk of losing TSWs throughout a study that explores sensitive topics such as trauma. As mentioned above in *the Chapter 5 Discussion*, a number of the TSWs expressed the difficulty of hearing the trauma survivors' past experiences and memories during the consultation sessions. Therefore, there is risk of turnover of TSWs.

Lastly, though the study aimed to provide preliminary evidence for the feasibility of task-shifting PE-PC in a low-resourced context, careful interpretation of the results is necessary.

6.2 Implications for future research

There are a number of considerations for future research, some of which can be drawn from the above mentioned limitations experienced conducting the present study. to my knowledge this study is one of the few that adopted such a comprehensive and nuanced approach to expanding trauma-focused treatment within low-resourced contexts at a primary care level through task-shifting. According to the National Mental Health Policy Framework and Strategic Plan 2023 – 2030, intersectoral commitment is essential and is the cornerstone to redressing the agenda for mental healthcare and improving pathways to mental care.

6.2.1 Scaling up

Considering the fact that healthcare inequities are omnipresent in LMIC, task shifting interventions are crucial to expanding mental healthcare and increasing its accessibility. Task shifting interventions also play an important role in addressing specific global health challenges regarding common mental health conditions such as PTSD. With this in mind, future research needs to evaluate the scalability of task shifting models and their adaptability to different healthcare settings and contexts within LMIC (National Department of Health, 2023).

In order to successfully up-scale the intervention, the primary researchers should integrate it into existing primary care or community based systems to ensure sustainability and accessibility (Galvin & Byansi,2020). The intervention should be further decentralised by collaborating with local organisations and engaging community members, and to facilitate the dissemination and implementation within the community. In keeping up with the digital world, researchers should also explore the use of technology, to facilitate the delivery and monitoring of the intervention.

Emphasis should be placed on how the selected task-shifting framework used to up-scale trauma intervention is context-specific. *Intervention transferability* is defined as the practical application of research to practice, which should be applied from a changeable perspective and framework. Future research must develop and evaluate training and implementation methods, such as exploring the optimal duration and content for training programmes, including various education levels.

Drawing from the current study, researchers are urged to investigate strategies to ensure ongoing development and skill maintenance among task shifting TSWs. Considering the

training programme requires assessing quality assurance mechanism to maintain high standards of care being provided (National Department of Health, 2023). Additionally, there are vital elements from the current study that aid in its replicability including the use of manuals both for training and implementation.

Lastly, it is important that researchers continue to monitor and evaluate the scaled-up intervention's implementation and outcomes to demonstrate its effectiveness to the stakeholders and ensure its improvement. Researchers should advocate for policies and funding support at a local and national level, to prioritise mental healthcare.

6.2.2 Evidence-based practice

Data from numerous studies, including Docrat et al. (2019), suggests that there needs to be more literature and research within the task-shifting area of study in LMIC, which highlights the significance of conducting such research. Conducting future research on task-shifting interventions can contribute to the development of evidence-based policies, guidelines, and practices. Considering how evidence-based practice involves integrating research findings to improve clinical practice, it may include assessing the long-term effectiveness in low-resource contexts.

Importantly, researchers are urged to investigate and compare task-shifting practices in different global and cultural contexts to identify the best practices and how it will affect the success of the task shifting intervention (WH0, 2022). To emphasise, Agyapong et al. (2015) argued for the scaling up of safe, effective and culturally sound mental health services. Evidence-based practice is the foundational principle to ensuring that patient care is continually improving because it encourages mental healthcare workers to incorporate new research findings into practice.

6.2.3 Community engagement

Drawing from the findings from the current study, engaging and collaborating with the community is paramount to understanding the roles, characteristics, and interactions of the intervention and documenting the system-wide impact of the intervention (Javadi et al., 2017). By collaborating and engaging with the community, the researchers can investigate how the

task-shifting interventions may be tailored to meet specific healthcare needs and serve disproportionated populations, including rural communities. Researchers should explore the benefits of interdisciplinary collaboration and coordination as recommended by the WHO Task Shifting Global Recommendations and Guidelines (2008).

The WHO (2022) states that many health systems are marked by significant gaps, imbalances and lack of resources that hinder the response to mental health needs. Moreover, even when the WHO (2008) recommendations are applied, as in the present study, the system precedes the efforts to expand mental healthcare, resulting in crucial barriers. As a response to the proliferating impact of PTSD and an inadequate mental healthcare system, it is necessary to explore innovative ways to expand services, such as task-shifting PE-PC. Moreover, it is crucial to accommodate diverse population groups in the healthcare system to highlight dimensions of diversity within implementation research (Celik et al., 2008).

The first WHO (2008) task-shifting recommendation and guideline stipulates that countries adopting task-shifting approaches should collaborate with relevant stakeholders. For example, the present study collaborated with several stakeholders, including the ADC, Rhodes University and primary care clinics, to ensure the functionality and sustainability of the intervention. Collaborating with these stakeholders employed a multisectoral approach to expanding mental health care and facilitated implementation. For example, in addition to providing an existing database of potential clients, working with the ADC created employment for the TSWs in the community.

Coupled with that, the WHO (2008) recommends exploring task-shifting frameworks that meet other critical public needs. This may include applying implementation research or diffusion frameworks, which guide the adaptation of research evidence into practical application. This recommendation is because the unequal allocation of resources in the healthcare system continues to disrupt the ability to translate interventions adequately within context, as in the current study (Foa et al., 2013). This highlights the call to develop more comprehensive psychosocial prevention, promotion, and treatment interventions (Burgees et al., 2020).

6.3 Conclusion

Implementing the PE-PC intervention has not been without its challenges; however, it has provided more positive outcomes than negative ones. Fundamentally the study serves to illustrate how PTSD psychotherapy can be task-shifted into low-resource communities through minimally trained TSWs. The (WHO, 2022). In conclusion, data obtained from the experiences and perceptions show that the TSWs view the PE-PC implementation as feasible in low-resource communities such as Makhanda, Eastern Cape at different scales in society. For transformation and reform to take place, future research needs to be mindful of the contextual factors that differ from the existing research and make necessary changes to adapt the interventions.

Reference

Agyapong, V. I., Osei, A., Farren, C. K., & McAuliffe, E. (2015). Task shifting–Ghana's community mental health workers' experiences and perceptions of their roles and scope of practice. *Global health action*, *8*(1), 28955.

Al-Busaidi, Z. Q. (2008). Qualitative research and its uses in health care. *Sultan Qaboos University Medical Journal*, 8(1), 11.

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).

American Psychological Association. (2017). Clinical practice guideline for the treatment of posttraumatic stress disorder (PTSD) in adults.

Ames, H., Glenton, C., & Lewin, S. (2019). Purposive sampling in a qualitative evidence synthesis: A worked example from a synthesis on parental perceptions of vaccination communication. *BMC medical research methodology*, *19*(1), 1-9.

Anakwenze, O. (2022). The cultural sensitivity continuum of mental health interventions in Sub-Saharan Africa: A systematic review. *Social Science & Medicine*, *306*, 115124.

Andreasen, N. C. (2022). What is post-traumatic stress disorder? *Dialogues in clinical neuroscience*.

Avis, M. (2005). Is there an epistemology for qualitative research? *Qualitative Research in Health Care* (pp. 3–15). essay, Open University Press.

Barbieri, A., Visco-Comandini, F., Alunni Fegatelli, D., Schepisi, C., Russo, V., Calò, F., ... & Stellacci, A. (2019). Complex trauma, PTSD and complex PTSD in African refugees. *European journal of psychotraumatology*, *10*(1), 1700621.

Barrett, A., Kajamaa, A., & Johnston, J. (2020). How to… be reflexive when conducting qualitative research. *The clinical teacher*, *17*(1), 9-12.

Barrett, D., & Twycross, A. (2018). Data collection in qualitative research. *Evidence-based nursing*, *21*(3), 63-64.

Barry, M. M., Clarke, A. M., Petersen, I., & Jenkins, R. (Eds.). (2019). *Implementing mental health promotion*. Springer Nature.

Bauer, M. S., & Kirchner, J. (2020). Implementation science: What is it and why should I care? *Psychiatry research*, *283*, 112376.

Bauer, M. S., Damschroder, L., Hagedorn, H., Smith, J., & Kilbourne, A. M. (2015). An introduction to implementation science for the non-specialist. *BMC psychology*, *3*(1), 1-12.

Baumann, A. A., & Cabassa, L. J. (2020). Reframing implementation science to address inequities in healthcare delivery. *BMC Health Services Research*, *20*, 1-9.

Bazen, A., Barg, F. K., & Takeshita, J. (2021). Research techniques made simple: an introduction to qualitative research. *Journal of Investigative Dermatology*, *141*(2), 241-247.

Bergmark, M., Bejerholm, U., & Markström, U. (2019). Implementation of evidence-based interventions: analyzing critical components for sustainability in community mental health services. *Social Work in Mental Health*, *17*(2), 129-148.

Bergström, A., Ehrenberg, A., Eldh, A. C., Graham, I. D., Gustafsson, K., Harvey, G., ... & Wallin, L. (2020). The use of the PARIHS framework in implementation research and practice—a citation analysis of the literature. *Implementation Science*, *15*, 1-51.

Bernet, A. C., Willens, D. E., & Bauer, M. S. (2013, April). Effectiveness-implementation hybrid designs: implications for quality improvement science. In *Implementation Science* (Vol. 8, No. 1, pp. 1-2). BioMed Central.

Blackstone, A. (2018). *Principles of sociological inquiry: Qualitative and quantitative methods*. Saylor Academy Open Textbooks.

Booysen, D. D., & Kagee, A. (2020). Implementing prolonged exposure therapy for PTSD in a context of ongoing adversity: A clinical case study. *Clinical Case Studies*, *19*(4), 258-269.

Booysen, D. D., & Kagee, A. (2020). The feasibility of prolonged exposure therapy for PTSD in low- and middle-income countries: a review. *European Journal of Psychotraumatology*, *11*(1), 1753941.

Booysen, D. D., & Kagee, A. (2020). The feasibility of prolonged exposure therapy for PTSD in low- and middle-income countries: A review. *European Journal of Psychotraumatology*, *11*(1), 1753941.

Booysen, D. D., & Kagee, A. (2021). Preliminary effectiveness of brief prolonged exposure therapy for ptsd: expanding access to effective therapies. *Clinical Case Studies*, *20*(6), 482-497.

Booysen, D. D., & Kagee, A. (2022). The double burden of treating traumatic stress in low-resource communities: experiences and perspectives of non-specialist health workers in South Africa. *South African Journal of Psychology*, *52*(1), 135-145.

Brailsford, S. (2005). Overcoming the barriers to implementation of operations research simulation models in healthcare. *Clinical and investigative medicine*, *28*(6), 312.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Braun, V., & Clarke, V. (2012). *Thematic analysis*. American Psychological Association.

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, *9*(1), 3.

Brownson, R. C., Kumanyika, S. K., Kreuter, M. W., & Haire-Joshu, D. (2021). Implementation science should give higher priority to health equity. *Implementation Science*, *16*, 1-16.

Bryant-Davis, T. (2019). The cultural context of trauma recovery: Considering the posttraumatic stress disorder practice guideline and intersectionality. *Psychotherapy*, *56*(3), 400.

Bryant, R. A. (2019). Post-traumatic stress disorder: a state-of-the-art review of evidence and challenges. *World psychiatry*, *18*(3), 259-269.

Burgess, R. A., Jain, S., Petersen, I., & Lund, C. (2020). Social interventions: a new era for global mental health? *The Lancet Psychiatry*, *7*(2), 118-119.

Byrne, D. (2021). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, *56*(3), 1391-1412.

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, *25*(8), 652-661.

Card, P. (2017). VA/DoD clinical practice guideline for the management of posttraumatic stress disorder and acute stress disorder. FOCUS, 16, 430-448.

Castillo, E. G., Ijadi-Maghsoodi, R., Shadravan, S., Moore, E., Mensah, M. O., Docherty, M., ... & Wells, K. B. (2019). Community interventions to promote mental health and social equity. *Current psychiatry reports*, *21*(5), 1-14.

Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds?. *Currents in pharmacy teaching and learning*, *10*(6), 807-815.

Celik, H., Abma, T. A., Widdershoven, G. A., van Wijmen, F. C., & Klinge, I. (2008). Implementation of diversity in healthcare practices: barriers and opportunities. *Patient Education and counseling*, *71*(1), 65-71.

Cigrang, J. A., Rauch, S. A., Avila, L. L., Bryan, C. J., Goodie, J. L., Hryshko-Mullen, A., & Peterson, A. L. (2011). Treatment of active-duty military with PTSD in primary care: Early findings. *Psychological Services*, *8*(2), 104.

Cigrang, J. A., Rauch, S. A., Mintz, J., Brundige, A. R., Mitchell, J. A., Najera, E., ... & Peterson, A. L. (2017). Moving effective treatment for posttraumatic stress disorder to primary care: A randomized controlled trial with active duty military. *Families, Systems, & Health*, *35*(4), 450.

Cigrang, J. A., Rauch, S. A., Mintz, J., Brundige, A., Avila, L. L., Bryan, C. J., ... & STRONG STAR Consortium. (2015). Treatment of active duty military with PTSD in primary care: A follow-up report. *Journal of Anxiety Disorders*, *36*, 110-114.

Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. *Qualitative psychology: A practical guide to research methods*, *3*, 222-248.

Collingridge, D. S., & Gantt, E. E. (2019). Republished: The quality of qualitative research. *American Journal of Medical Quality*, *34*(5), 439-445.

Cresswell-Smith, J., Mäkikärki, N., Appelqvist-Schmidlechner, K., & Wahlbeck, K. (2022). Finding the right words: Articulating the value of mental health promotion. A focus group study. *Journal of Community Psychology*.

Damschroder, L. J. (2020). Clarity out of chaos: use of theory in implementation research. *Psychiatry research*, *283*, 112461.

Darnell, D. A., Parker, L. E., Wagner, A. W., Dunn, C. W., Atkins, D. C., Dorsey, S., & Zatzick, D. F. (2019). Task-shifting to improve the reach of mental health interventions for trauma patients: findings from a pilot study of trauma nurse training in patient-centered activity scheduling for PTSD and depression. *Cognitive behaviour therapy*, *48*(6), 482-496.

Dawson, A. J., Buchan, J., Duffield, C., Homer, C. S., & Wijewardena, K. (2014). Task shifting and sharing in maternal and reproductive health in low-income countries: a narrative synthesis of current evidence. *Health policy and planning*, *29*(3), 396-408.

De Kock, J., & Pillay, B. (2018). South Africa's rural mental health human resource crisis: a situation analysis and call for innovative task-shifting. *Family Medicine & Primary Care Review*, (2), 124-130.

Dearing, J. W., & Cox, J. G. (2018). Diffusion of innovations theory, principles, and practice. *Health affairs*, *37*(2), 183-190.

Deimling Johns, L., Power, J., & MacLachlan, M. (2018). Community-based mental health intervention skills: Task shifting in low-and middle-income settings. *International Perspectives in Psychology*, *7*(4), 205-230.

Docrat, S., Besada, D., Cleary, S., Daviaud, E., & Lund, C. (2019). Mental health system costs, resources and constraints in South Africa: a national survey. *Health policy and planning*, *34*(9), 706-719.

Duan, Y., Iaconi, A., Wang, J., Perez, J. S., Song, Y., Chamberlain, S. A., ... & Berta, W. (2022). Conceptual and relational advances of the PARIHS and i-PARIHS frameworks over the last decade: a critical interpretive synthesis. *Implementation Science*, *17*(1), 78.

Eftekhari, A., Crowley, J. J., Ruzek, J. I., Garvert, D. W., Karlin, B. E., & Rosen, C. S. (2015). Training in the implementation of prolonged exposure therapy: Provider correlates of treatment outcome. *Journal of Traumatic Stress*, *28*(1), 65-68.

Eldridge, S. M., Chan, C. L., Campbell, M. J., Bond, C. M., Hopewell, S., Thabane, L., & Lancaster, G. A. (2016). CONSORT 2010 statement: extension to randomised pilot and feasibility trials. *BMJ*, *355*.

Esponda, G. M., Hartman, S., Qureshi, O., Sadler, E., Cohen, A., & Kakuma, R. (2020). Barriers and facilitators of mental health programmes in primary care in low-income and middle-income countries. *The Lancet Psychiatry*, *7*(1), 78-92.

Foa, E. B. (2011). Prolonged Exposure Therapy: Past, Present, And Future. Depression And Anxiety 28 : 1043–1047.

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: exposure to corrective information. *Psychological bulletin*, *99*(1), 20.

Foa, E. B., Gillihan, S. J., & Bryant, R. A. (2013). Challenges and successes in dissemination of evidence-based treatments for posttraumatic stress: Lessons learned from prolonged exposure therapy for PTSD. *Psychological Science in the Public Interest*, *14*(2), 65-111.

Foa, E. B., Huppert, J. D., & Cahill, S. P. (2006). Emotional Processing Theory: An Update.

Foa, E. B., McLean, C. P., Zang, Y., Rosenfield, D., Yadin, E., Yarvis, J. S., ... & Strong Star Consortium. (2018). Effect of prolonged exposure therapy delivered over 2 weeks vs 8 weeks vs present-centered therapy on PTSD symptom severity in military personnel: A randomized clinical trial. *Jama*, *319*(4), 354-364.

Frimpong, S., Seidu, M., & Hilton, S. K. (2021). Using PARIHS framework to design a community-based COVID-19 intervention in rural Ghana. *medRxiv*, 2021-03.

Furnham, A., & Swami, V. (2018). Mental health literacy: A review of what it is and why it matters. *International Perspectives in Psychology: Research, Practice, Consultation*, *7*(4), 240.

Gagnon-Sanschagrin, P., Schein, J., Urganus, A., Serra, E., Liang, Y., Musingarimi, P., ... & Davis, L. L. (2022). Identifying individuals with undiagnosed post-traumatic stress disorder in a large United States civilian population–a machine learning approach. *BMC psychiatry*, *22*(1), 630.

Galvin, M., & Byansi, W. (2020). A systematic review of task shifting for mental health in sub-Saharan Africa. *International Journal of Mental Health*, *49*(4), 336-360.

Geier, T. J., Hunt, J. C., Nelson, L. D., Brasel, K. J., & deRoon-Cassini, T. A. (2019). Detecting PTSD in a traumatically injured population: The diagnostic utility of the PTSD Checklist for DSM-5. *Depression and anxiety*, *36*(2), 170-178.

Gotham, H. J. (2004). Diffusion of Mental Health and Substance Abuse Treatments: Development Dissemination, and Implementation. *Clinical Psychology: Science and Practice*, *11*(2), 160.

Green, L. W., Ottoson, J. M., Garcia, C., & Hiatt, R. A. (2009). Diffusion theory and knowledge dissemination, utilization, and integration in public health. *Annual review of public health*, *30*, 151-174.

Greene, T., Neria, Y., & Gross, R. (2016). Prevalence, detection and correlates of PTSD in the primary care setting: a systematic review. *Journal of clinical psychology in medical settings*, *23*, 160-180.

Guion, L. A., Diehl, D. C., & McDonald, D. (2011). Conducting an In-depth Interview: FCS6012/FY393, rev. 8/2011. *Edis*, *2011*(8).

Hamblen, J. L., Norman, S. B., Sonis, J. H., Phelps, A. J., Bisson, J. I., Nunes, V. D., ... & Schnurr, P. P. (2019). A guide to guidelines for the treatment of posttraumatic stress disorder in adults: An update. *Psychotherapy*, 56(3), 359.

Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry research*, *280*, 112516.

Harrison, C., Loxton, H., & Somhlaba, N. Z. (2021). Stress and coping: considering the influence of psychological strengths on the mental health of at-risk South African adolescents. *Child Care in Practice*, *27*(1), 72-86.

Harvey, G., & Kitson, A. (2016). PARIHS revisited: from heuristic to integrated framework for the successful implementation of knowledge into practice. *Implementation science*, *11*(1), 1-13.

Harvey, G., & Kitson, A. (2020). Promoting action on research implementation in health services: the integrated-PARIHS framework. In *Handbook on Implementation Science* (pp. 114-143). Edward Elgar Publishing.

Heim, E., Karatzias, T., & Maercker, A. (2022). Cultural concepts of distress and complex PTSD: Future directions for research and treatment. *Clinical Psychology Review*, *93*, 102143.

Hembree, E. A., Rauch, S. A., & Foa, E. B. (2003). Beyond the manual: The insider's guide to prolonged exposure therapy for PTSD. *Cognitive and Behavioral Practice*, *10*(1), 22-30.

Hobfoll, S. E., Gaffey, A. E., & Wagner, L. M. (2020). PTSD and the influence of context: The self as a social mirror. *Journal of personality*, *88*(1), 76-87.

Hoeft, T. J., Stephens, K. A., Vannoy, S. D., Unützer, J., & Kaysen, D. (2019). Interventions to treat posttraumatic stress disorder in partnership with primary care: a review of feasibility and large randomized controlled studies. *General hospital psychiatry*, *60*, 65-75.

Holloway, I. (2005). *EBOOK: Qualitative Research in Health Care*. McGraw-Hill Education (UK).

Hunter, S. C., Kim, B., Mudge, A., Hall, L., Young, A., McRae, P., & Kitson, A. L. (2020). Experiences of using the i-PARIHS framework: a co-designed case study of four multi-site implementation projects. *BMC health services research*, *20*, 1-14.

Jacobs, Y., Myers, B., van der Westhuizen, C., Brooke-Sumner, C., & Sorsdahl, K. (2021). Task sharing or task dumping: Counsellors experiences of delivering a psychosocial intervention for mental health problems in South Africa. *Community mental health journal*, *57*(6), 1082-1093.

Javadi, D., Feldhaus, I., Mancuso, A., & Ghaffar, A. (2017). Applying systems thinking to task shifting for mental health using lay providers: a review of the evidence. *Global Mental Health*, *4*.

Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A Review of the Quality Indicators of Rigor in Qualitative Research. *American Journal of Pharmaceutical Education*, *84*(1). https://doi.org/10.5688/ajpe7120.

Jorm, A. F. (2019). The concept of mental health literacy. *International handbook of health literacy: Research, practice and policy across the life-span*, 53-66.

Kantor, V., Knefel, M., & Lueger-Schuster, B. (2017). Perceived barriers and facilitators of mental health service utilization in adult trauma survivors: A systematic review. *Clinical Psychology Review*, *52*, 52-68.

Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. *BMJ Quality & Safety*, *7*(3), 149-158.

Kohrt, B. A., Asher, L., Bhardwaj, A., Fazel, M., Jordans, M. J., Mutamba, B. B., ... & Patel, V. (2018). The role of communities in mental health care in low-and middle-income countries: a meta-

review of components and competencies. *International journal of environmental research and public health*, *15*(6), 1279.

Kola, L. (2020). Global mental health and COVID-19. *The Lancet Psychiatry*, *7*(8), 655-657.

Kometsi, M. J., Mkhize, N. J., & Pillay, A. L. (2020). Mental health literacy: conceptions of mental illness among African residents of Sisonke District in KwaZulu-Natal, South Africa. *South African Journal of Psychology*, *50*(3), 347-358.

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, *24*(1), 120-124.

Lancaster, G. A. (2015). Pilot and feasibility studies come of age!. *Pilot and Feasibility Studies*, *1*(1), 1-4.

Lancaster, G. A., & Thabane, L. (2019). Guidelines for reporting non-randomised pilot and feasibility studies. *Pilot and feasibility studies*, *5*(1), 1-6.

Landes, S. J., McBain, S. A., & Curran, G. M. (2020). Reprint of an introduction to effectiveness-implementation hybrid designs. *Psychiatry research*, *283*, 112630.

Laycock, A., Harvey, G., Percival, N., Cunningham, F., Bailie, J., Matthews, V., ... & Bailie, R. (2018). Application of the i-PARIHS framework for enhancing understanding of interactive dissemination to achieve wide-scale improvement in Indigenous primary healthcare. *Health research policy and systems*, *16*, 1-16.

Le, P. D., Eschliman, E. L., Grivel, M. M., Tang, J., Cho, Y. G., Yang, X., ... & Yang, L. H. (2022). Barriers and facilitators to implementation of evidence-based task-sharing mental health interventions in low-and middle-income countries: a systematic review using implementation science frameworks. *Implementation Science*, *17*(1), 1-25.

Lederman, N. G., & Lederman, J. S. (2015). What is a theoretical framework? A practical answer. *Journal of Science Teacher Education*, *26*(7), 593-597.

Lehmann, U., Van Damme, W., Barten, F., & Sanders, D. (2009). Task shifting: the answer to the human resources crisis in Africa? *Human resources for health*, *7*(1), 1-4.

Leonard, E., de Kock, I., & Bam, W. (2020). Barriers and facilitators to implementing evidence-based health innovations in low-and middle-income countries: a systematic literature review. *Evaluation and Program Planning*, *82*, 101832.

Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review*, *19*(1), 94-106.

Maconick, L., Jenkins, L. S., Fisher, H., Petrie, A., Boon, L., & Reuter, H. (2018). Mental health in primary care: Integration through in-service training in a South African rural clinic. *African Journal of Primary Health Care and Family Medicine*, *10*(1), 1-7.

Martin, A., Naunton, M., Kosari, S., Peterson, G., Thomas, J., & Christenson, J. K. (2021). Treatment guidelines for PTSD: a systematic review. Journal of Clinical Medicine, 10(18), 4175.

Martin, A., Naunton, M., Kosari, S., Peterson, G., Thomas, J., & Christenson, J. K. (2021). Treatment guidelines for PTSD: a systematic review. *Journal of Clinical Medicine*, *10*(18), 4175.

Matoane, M. (2012). Locating context in counselling: The development of indigenous psychology in South Africa. *Psychotherapy and Politics International*, *10*(2), 105-115.

McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. *Medical teacher*, *41*(9), 1002-1006.

McInnis, M. G., & Merajver, S. D. (2011). Global mental health: Global strengths and strategies: Task-shifting in a shifting health economy. *Asian Journal of Psychiatry*, *4*(3), 165-171.

Mclean, C. P., & Foa, E. B. (2011). Prolonged Exposure Therapy For Post-Traumatic Stress Disorder: A Review Of Evidence And Dissemination. *Expert Reviews Neurotherapy* 11(8), 1151–1163.

McLean, C. P., & Foa, E. B. (2013). Dissemination and implementation of prolonged exposure therapy for posttraumatic stress disorder. *Journal of anxiety disorders*, *27*(8), 788-792.

McLean, C. P., & Foa, E. B. (2014). The use of prolonged exposure therapy to help patients with post-traumatic stress disorder. *Clinical Practice*, *11*(2), 233.

Memon, A., Taylor, K., Mohebati, L. M., Sundin, J., Cooper, M., Scanlon, T., & de Visser, R. (2016). Perceived barriers to accessing mental health services among black and minority ethnic (BME) communities: a qualitative study in Southeast England. *BMJ open*, *6*(11), e012337.

Mendenhall, E., De Silva, M. J., Hanlon, C., Petersen, I., Shidhaye, R., Jordans, M., ... & Lund, C. (2014). Acceptability and feasibility of using non-specialist health workers to deliver mental health care: stakeholder perceptions from the PRIME district sites in Ethiopia, India, Nepal, South Africa, and Uganda. *Social science & medicine*, *118*, 33-42.

Meyer, J. (2000). Using qualitative methods in health related action research. *BMJ*, *320*(7228), 178-181.

Miao, X. R., Chen, Q. B., Wei, K., Tao, K. M., & Lu, Z. J. (2018). Posttraumatic stress disorder: from diagnosis to prevention. *Military Medical Research*, *5*(1), 1-7.

Mijovic, H., McKnight, J., & English, M. (2016). What does the literature tell us about health workers' experiences of task-shifting projects in sub-Saharan Africa? A systematic, qualitative review. *Journal of clinical nursing*, *25*(15-16), 2083-2100.

Morar, T., Breedt, J. E., Mdaka, N., Maaroganye, K., & Robertson, L. (2023). Is mental health in South Africa moving forward?. *BJPsych International*, 1-3.

National Department of Health. (2023). National Mental Health Policy Framework and Strategic Plan 2023–2030. National Department of Health, South Africa.

National Institute for Health and Clinical Excellence (Grande-Bretagne). (2007). *How to change practice: Understand, identify and overcome barriers to change*. National Institute for Health and Clinical Excellence. Available at: http://www.nice.org.uk/media/AF1/73/HowToGuideChangePractice.pdf.

Nilsen, P. (2020). Making sense of implementation theories, models, and frameworks. In *Implementation Science 3.0* (pp. 53-79). Springer, Cham.

Norman, J. E., Lawton, J., Stock, S. J., Siassakos, D., Norrie, J., Hallowell, N., ... & Whyte, S. (2021). Qualitative research. In *Feasibility and design of a trial regarding the optimal mode of delivery for preterm birth: the CASSAVA multiple methods study*. NIHR Journals Library.

Ogbeide, S. A., Young, A., Houston, B., & Knight, C. (2021). Treating Post-traumatic Stress Disorder with a Prolonged Exposure Protocol Within Primary Care Behavioral Health: A Case Example. *Journal of Clinical Psychology in Medical Settings*, *28*(3), 575-583.

Orkin, A. M., Rao, S., Venugopal, J., Kithulegoda, N., Wegier, P., Ritchie, S. D., ... & Upshur, R. (2021). Conceptual framework for task shifting and task sharing: an international Delphi study. *Human Resources for Health*, *19*(1), 1-8.

Paina, L., Namazzi, G., Tetui, M., Mayora, C., Kananura, R. M., Kiwanuka, S. N., ... & Ekirapa-Kiracho, E. (2019). Applying the model of diffusion of innovations to understand facilitators for the implementation of maternal and neonatal health programmes in rural Uganda. *Globalization and health*, *15*, 1-11.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, *42*, 533-544.

Pearson, N., Naylor, P. J., Ashe, M. C., Fernandez, M., Yoong, S. L., & Wolfenden, L. (2020). Guidance for conducting feasibility and pilot studies for implementation trials. *Pilot and feasibility studies*, *6*(1), 1-12.

Pereira, B., Andrew, G., Pednekar, S., Kirkwood, B. R., & Patel, V. (2011). The integration of the treatment for common mental disorders in primary care: experiences of health care providers in the MANAS trial in Goa, India. *International journal of mental health systems*, *5*(1), 1-9.

Petersen, I., Lund, C., & Stein, D. J. (2011). Optimizing mental health services in low-income and middle-income countries. *Current opinion in psychiatry*, *24*(4), 318-323.

Petersen, I., Lund, C., Bhana, A., Flisher, A. J., & Mental Health and Poverty Research Programme Consortium. (2012). A task shifting approach to primary mental health care for adults in South Africa: human resource requirements and costs for rural settings. *Health policy and planning*, *27*(1), 42-51.

Pope, C., & Mays, N. (Eds.). (2020). *Qualitative research in health care* (pp. 111-134). Oxford, UK:: Wiley Blackwell.

Pope, C., Ziebland, S., & Mays, N. (2000). Qualitative research in health care: Analysing qualitative data. *BMJ: British Medical Journal*, *320*(7227), 114.

Portnoy, B., Anderson, D. M., & Eriksen, M. P. (1989). Application of diffusion theory to health promotion research. *Family and Community Health*, *12*(3), 63-71.

Possemato, K. (2011). The current state of intervention research for posttraumatic stress disorder within the primary care setting. *Journal of clinical psychology in medical settings*, *18*(3), 268-280.

Purgato, M., Uphoff, E., Singh, R., Pachya, A. T., Abdulmalik, J., & van Ginneken, N. (2020). Promotion, prevention and treatment interventions for mental health in low-and middle-income countries through a task-shifting approach. *Epidemiology and psychiatric sciences*, *29*.

Rapport, F., Hogden, A., Faris, M., Bierbaum, M., Clay-Williams, R., Long, J., ... & Braithwaite, J. (2018). Qualitative research in healthcare: modern methods, clear translation-a white paper.

Ratnayake, P., & Hyde, C. (2019). Mental health literacy, help-seeking behaviour and wellbeing in young people: implications for practice. *The Educational and Developmental Psychologist*, *36*(1), 16-21.

Rauch, S. A., Cigrang, J., Austern, D., Evans, A., & STRONG STAR Consortium. (2017). Expanding the reach of effective PTSD treatment into primary care: Prolonged exposure for primary care. *Focus*, *15*(4), 406-410.

Rauch, S. A., Eftekhari, A., & Ruzek, J. I. (2012). Review of exposure therapy: A gold standard for PTSD treatment. *J Rehabil Res Dev*, *49*(5), 679-687.

Rauch, S. A., Kim, H. M., Acierno, R., Ragin, C., Wangelin, B., Blitch, K., ... & Cigrang, J. (2022). Improving function through primary care treatment of PTSD: The IMPACT study protocol. *Contemporary Clinical Trials*, *120*, 106881.

Rauch, S., & Foa, E. (2006). Emotional processing theory (EPT) and exposure therapy for PTSD. *Journal of Contemporary Psychotherapy*, *36*, 61-65.

Raunch, S. A. M., Wilson, C. K., Jungerman, J., Bollini, A., & Eilender, P. (2020). Implementation Of Prolonged Exposure For PTSD: Pilot Program Of Pe For Primary Care In VA. *Cognitive And Behavioral Practice* 29 ,259–266.

Raviola, G., Naslund, J. A., Smith, S. L., & Patel, V. (2019). Innovative models in mental health delivery systems: task sharing care with non-specialist providers to close the mental health treatment gap. *Current psychiatry reports*, *21*(6), 1-13.

Renjith, V., Yesodharan, R., Noronha, J. A., Ladd, E., & George, A. (2021). Qualitative methods in health care research. *International journal of preventive medicine*, *12*.

Roberts, R. E. (2020). Qualitative Interview Questions: Guidance for Novice Researchers. *Qualitative Report*, *25*(9).

Rolfe, D. E., Ramsden, V. R., Banner, D., & Graham, I. D. (2018). Using qualitative health research methods to improve patient and public involvement and engagement in research. *Research involvement and engagement*, *4*(1), 1-8.

Rosenkrantz, L., Schuurman, N., Arenas, C., Jimenez, M. F., & Hameed, M. S. (2021). Understanding the barriers and facilitators to trauma registry development in resource-constrained settings: a survey of trauma registry stewards and researchers. *Injury*, *52*(8), 2215-2224.

Rossouw, J., Yadin, E., Alexander, D., & Seedat, S. (2018). Prolonged exposure therapy and supportive counselling for post-traumatic stress disorder in adolescents: task-shifting randomised controlled trial. *The British Journal of Psychiatry*, *213*(4), 587-594.

Rycroft-Malone, J. (2004). The PARIHS framework—a framework for guiding the implementation of evidence-based practice. *Journal of nursing care quality*, *19*(4), 297-304.

Ryder, A. L., Azcarate, P. M., & Cohen, B. E. (2018). PTSD and physical health. *Current psychiatry reports*, *20*, 1-8.

Sanetti, L. M. H., & Collier-Meek, M. A. (2019). Increasing implementation science literacy to address the research-to-practice gap in school psychology. *Journal of School Psychology*, *76*, 33-47.

Sanson-Fisher, R. W. (2004). Diffusion of innovation theory for clinical change. *Medical journal of Australia*, *180*, S55-S56.

Seedat, S., Nyamai, C., Njenga, F., Vythilingum, B., & Stein, D. J. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools. BRITISH JOURNAL OF PSYCHIATRY, 184, 169-175

Shahmalak, U., Blakemore, A., Waheed, M. W., & Waheed, W. (2019). The experiences of lay health workers trained in task-shifting psychological interventions: a qualitative systematic review. *International Journal of Mental Health Systems*, *13*(1), 1-15.

Sibeko, G., Milligan, P. D., Roelofse, M., Molefe, L., Jonker, D., Ipser, J., ... & Stein, D. J. (2018). Piloting a mental health training programme for community health workers in South Africa: an exploration of changes in knowledge, confidence and attitudes. *BMC psychiatry*, *18*(1), 1-10.

Spottswood, M., Davydow, D. S., & Huang, H. (2017). The prevalence of posttraumatic stress disorder in primary care: a systematic review. *Harvard review of psychiatry*, *25*(4), 159.

Sripada, R. K., Walters, H. M., Ganoczy, D., Avallone, K. M., Cigrang, J. A., & Rauch, S. A. (2022). Feasibility and Acceptability of Prolonged Exposure in Primary Care (PE-PC) for Posttraumatic Stress Disorder in Federally Qualified Health Centers: A Pilot Study. *Administration and Policy in Mental Health and Mental Health Services Research*, *49*(5), 722-734.

Stetler, C. B., Damschroder, L. J., Helfrich, C. D., & Hagedorn, H. J. (2011). A guide for applying a revised version of the PARIHS framework for implementation. *Implementation science*, *6*(1), 1-10.

Stevens, J. S., & Jovanovic, T. (2019). Role of social cognition in post-traumatic stress disorder: A review and meta-analysis. *Genes, Brain and Behavior*, *18*(1), e12518.

Stevenson, A., Beltran, M., Misra, S., Ametaj, A. A., Bronkhorst, A., Gelaye, B., ... & Zingela, Z. (2023). Trauma exposure and psychometric properties of the life events checklist among adults in South Africa. European journal of psychotraumatology, 14(1), 2172257.

Swain, K. D., Pillay, B. J., & Kliewer, W. (2017). Traumatic stress and psychological functioning in a South African adolescent community sample. *South African journal of psychiatry*, *23*.

Tabak, R. G., Khoong, E. C., Chambers, D. A., & Brownson, R. C. (2012). Bridging research and practice: models for dissemination and implementation research. *American journal of preventive medicine*, *43*(3), 337-350.

Tay, J. L., Tay, Y. F., & Klainin-Yobas, P. (2018). Mental health literacy levels. *Archives of psychiatric nursing*, *32*(5), 757-763.

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, *2*, 17-37.

Ullrich, P. M., Sahay, A., & Stetler, C. B. (2014). Use of implementation theory: a focus on PARIHS. *Worldviews on Evidence-Based Nursing*, *11*(1), 26-34.

Ventevogel, P., Ommeren, M. V., Schilperoord, M., & Saxena, S. (2015). Improving mental health care in humanitarian emergencies. *Bulletin of the World Health Organization*, *93*.

Wakida, E. K., Okello, E. S., Rukundo, G. Z., Akena, D., Alele, P. E., Talib, Z. M., & Obua, C. (2019). Health system constraints in integrating mental health services into primary healthcare in rural Uganda: perspectives of primary care providers. *International journal of mental health systems*, *13*(1), 1-12.

Wakida, E. K., Talib, Z. M., Akena, D., Okello, E. S., Kinengyere, A., Mindra, A., & Obua, C. (2018). Barriers and facilitators to the integration of mental health services into primary health care: a systematic review. *Systematic reviews*, *7*(1), 1-13.

Waltz, T. J., Powell, B. J., Fernández, M. E., Abadie, B., & Damschroder, L. J. (2019). Choosing implementation strategies to address contextual barriers: diversity in recommendations and future directions. *Implementation science*, *14*(1), 1-15.

Watson, P. (2019). PTSD as a public mental health priority. *Current Psychiatry Reports*, *21*, 1-12.

WHO. (2008). Task shifting : rational redistribution of tasks among health workforce teams : global recommendations and guidelines. Geneva: WHO.

WHO. (2022). World Mental Health Report: Transforming mental health for all. Geneva: WHO.

Williams, D. R. (2018). Stress and the mental health of populations of color: Advancing our understanding of race-related stressors. *Journal of health and social behavior*, *59*(4), 466-485.

Williams, D. R., Herman, A., Kessler, R. C., Sonnega, J., Seedat, S., Stein, D. J., ... & Wilson, C. M. (2004). The South Africa stress and health study: rationale and design. *Metabolic brain disease*, *19*, 135-147.

Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, *15*(1), 45-55.

Williams, V., Boylan, A. M., & Nunan, D. (2019). Qualitative research as evidence: expanding the paradigm for evidence-based healthcare. *BMJ evidence-based medicine*, *24*(5), 168-169.

Yapa, H. M., & Bärnighausen, T. (2018). Implementation science in resource-poor countries and communities. *Implementation Science*, *13*(1), 1-13.

Appendices

Appendix A: Rhodes University Ethical Approval

Rhodes University Human Ethics Committee
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NHREC Registration number: RC-241114-045

https://www.ru.ac.za/researchgateway/ethics/

13 December 2021

Dr Duane Booysen

Psychology

Email: d.booysen@ru.ac.za

Review Reference: 2021-5257-6490

Dear Dr Duane Booysen

Re: Implementation of Prolonged Exposure Therapy for PTSD at a community trauma centre in Cape Town: A feasibility trial

Principal Investigator: Dr Duane Booysen

Collaborators: Prof Ashraf Kagee

This letter confirms that the above research proposal has been reviewed by the Rhodes University Human Ethics Committee (RU-HEC) and **PROVISIONALLY APPROVED PENDING PERMISSION/GATEKEEPER LETTER(S)**.

Gatekeeper permission is required from:

The Trauma Centre for Survivors of Violence and Torture

Once the Gatekeeper permission letter/s has been received please forward it to the Ethics Coordinator, in order to finalize your ethics approval.

Sincerely,

Prof. Arthur Webb

Chair: Rhodes University Human Ethics Committee, RU-HEC

cc: Ms Danielle de Vos - Ethics Coordinator

Appendix B: TSW Consent Form

RHODES UNIVERSITY

Grahamstown • 6140 • South Africa

RHODES UNIVERSITY
CLIENT CONSENT TO PARTICIPATE IN RESEARCH

Title: Implementation of Prolonged Exposure Therapy for PTSD at a Community Trauma Centre in a Low Resource Context: A Hybrid-1 Effectiveness-Implementation Clinical Trial

You are asked to participate in a research study conducted by Mr. Duane D. Booysen (Principal investigator), from the department of psychology at Rhodes University, and his collaborators, Prof. Debbie Kaminer (University of Cape Town), Prof Sheila Rauch (Emory University), Clair Robbins (Duke University), and Lisa-Ann Cuccurullo (National Centre for PTSD, USA). The results of the study will contribute to academic publication(s), and conference presentation(s).

You were selected as a possible participant in this study because you present at the Trauma Centre for Survivors of Violence and Torture seeking counselling for traumatic stress.

1. PURPOSE OF THE STUDY

The primary aim of the study is to investigate whether prolonged exposure therapy for primary care (PE-PC) is an effective therapy for post-traumatic stress disorder (PTSD) among adults at a primary care level. A secondary aim is to ascertain whether PE-PC for PTSD is a feasible treatment among trauma counsellors, and if PE-PC is an acceptable treatment among adults from a resource-constrained context.

2. PROCEDURES

If you volunteer to participate in this study, I will ask you to do the following things:

- Participate in a screening interview to determine if you meet the criteria to participate in the study. If you participate in phase 1, you will be assessed before the therapy begins, and when you complete the counselling. In phase 1, you will attend four weekly sessions of trauma counselling (30 min).
- If you participate in phase 2, you will be assessed before the therapy begins, when you complete the counselling, and again at three- and six-months after you have received counselling. In phase 2, you will be randomly assigned to the experimental group (PE-PC; 4 weekly sessions of 30 min) or the treatment as usual (TAU: 6 sessions of 60 min) therapy at the Trauma Centre.
- All counselling sessions will be video recorded to ensure that the counsellors adhere to the treatment guidelines of PE-PC and TAU.

- In addition, for phase 1 or 2 you will also be invited to be interviewed about your experience of receiving PE-PC for PTSD.

3. POTENTIAL RISKS AND DISCOMFORTS

The research obtained ethical clearance by the Rhodes University Ethical Standards Committee (RUESC) and permission from the director of the Trauma Centre. The study will prioritise the rights and dignity of all clients involved.

Firstly, you have the right to decline and/or exit the study at any time. Secondly, if you decide to opt out of the study you can still use the services of the Trauma Centre. Thirdly, if you decide to decline or withdraw from the study you will not be treated unfairly. Lastly, if you feel it is necessary and based on your psychological functioning, you can continue treatment at the trauma centre once you have completed your participation in the project.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

In phase 1, you will receive 4 sessions of trauma therapy, which is an evidence-based trauma therapy for treatment of PTSD. In phase 2, you may either participate in the experimental group (PE-PC) or the control group (TAU) and will contribute to ascertaining the effectiveness and implementation of trauma therapy in a South African context. In addition, if you participate in phase 2, you will also have the opportunity to talk about your experience of PE-PC.

The research will contribute to the literature on evidence-based practices in South African psychology, with a specific focus on treating traumatic stress at primary healthcare or non-governmental (NGO) level in South Africa.

5. PAYMENT FOR PARTICIPATION

You will be reimbursed for transport cost. A standard fee of R50 will be given to all clients. In phase 1, clients who attend pre- and post-intervention assessments, and all 4 treatment sessions will be reimbursed. In phase 2, all clients who participate in pre- and post-intervention assessments, treatment sessions, and subsequent follow-ups at three and 6-months will be reimbursed for travel costs.

6. CONFIDENTIALITY

Any information that is obtained about this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of removing your personal details from documents and use a participant number for each person. All paper documents will be safeguarded at the personal office of the principal investigator, and electronic data will be encrypted and stored on Dropbox storage owned by the PI. These storage spaces will have controlled access. The principal investigator and research coordinator will have access to the Dropbox stored data.

All counselling sessions will be video recorded, and interviews will be audio recorded, transcribed, and stored. The principal investigator will oversee that these recordings and interviews are stored on a password protected Dropbox account. The information will also be encrypted and protected and only accessible to the principle investigator (Duane D. Booysen). You have the right to listen or request a copy of the video and or audio recordings.

The results of the research will be prepared for academic publication and presentation at conferences. Your identity will remain anonymous.

7. PARTICIPATION AND WITHDRAWAL

You can choose to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and remain in the study. The PI may withdraw you from this study if circumstances arise which warrant doing so. You may be asked to withdraw from the study if your well-being is at risk during the study, not attending sessions, if you are a risk to any of the staff at the Trauma Centre.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Duane D. Booysen (Principal investigator) on 0781676607/ d.booysen@ru.ac.za

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact ethics coordinator, Mr Siyanda Manqele [s.manqele@ru.ac.za ; (+27) 046 603 7727] at the Research Office, Rhodes University.

SIGNATURE OF RESEARCH SUBJECT

The information above was described to [*me/the subject/the participant]* by [*name of relevant person:* _____*]* in [*Afrikaans/English/Xhosa/other]* and [*I am/the subject is/the participant is]* in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject]* was given the opportunity to ask questions and these questions were answered to *[my/his/her]* satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

_____

Name of Participant

_____ _____

Signature of Participant or Legal Representative **Date**

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant]* and/or [his/her] representative _____ [*name of the representative]. [H*e/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [*Afrikaans/*English/*Xhosa/*Other*] and [*no translator was used/this conversation was translated into* _____ by _____].

_____ _____

Signature of Investigator **Date**

Appendix C: Interview Guide

TSW Interview Guide

PE-PC Training-related questions:

1. Describe your experience of the PE-PC training.
2. Would you say you were provided sufficient information?
3. What do you think of training material (manuals and lectures)?
4. Was the training duration sufficient? If not, how long should it be?
5. Were there any challenges during the training?
6. How could those challenges be improved?
7. How did you understand PTSD or trauma?

PE-PC Delivery-related questions:

1. How would you describe your role as a TSW?
2. What were your perceptions of the role?
3. What could help facilitate your role?
4. What was your experience of implementing PE-PC?
5. What was your state of readiness during the implementation?
6. How did you experience treating PTSD?
   Probe on client's trauma experiences and narratives.
7. What were some of the barriers and facilitators to delivering PE-PC?
8. How did having physical aids (PE-PC manuals) impact implementation?
9. Would supervision during the implementation have been beneficial?
10. Describe how you experienced the weekly meetings.
    Explore frequency, feedback, etc.
11. Were the meetings beneficial?
12. Would you recommend the intervention?
    Probe any concerns they may have.

Contextual questions:

1. Describe the community/area/neighbourhood where you implemented PE-PC?
2. What are some of the contextual barriers or facilitators?
   Probe ongoing trauma and crime, social services, etc.
3. What were some of the factors that assisted or challenged delivery and implementation of PE-PC?
   Explore: Familial/Social support. Stigma.
4. How did you view the uptake of this intervention?