The Feasibility of Disseminating and Implementing Prolonged Exposure Therapy for Survivors of Trauma in South Africa: A mixed method pilot and feasibility study

by

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Declaration

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December 2021
Abstract

The study investigated the feasibility of disseminating and implementing brief prolonged exposure therapy (PE) for post-traumatic stress disorder (PTSD) in South Africa. I used a mixed method design to investigate and explore the broad aim, which was to implement PE in a South African context, and to explore whether PE is feasible and acceptable in a South African context. The study had three aims.

The first aim was to explore the experiences and perspectives of trauma counsellors treating PTSD in low resource communities and to explore their attitudes toward the use of PE in South Africa. Using Thematic Analysis (TA), eighteen counsellors (n = 18) participated in semi-structured individual interviews across four community counselling centres located in the Western Cape (WC) and Eastern Cape (EC) of South Africa.

The first aim produced eight themes that were grouped under three superordinate themes. The superordinate themes were working as a counsellor, which consisted of the following themes: encountering trauma narratives, social support and resilience, treatments for trauma, and a collective approach. The second superordinate theme was trauma in the social context, which consisted of: helplessness and social factors. The final superordinate theme was experiences of growth, which included: helping others heal and empowerment.

The second aim of the study investigated the effectiveness of brief PE therapy for treatment of PTSD at two community counselling centres in the WC and EC of South Africa. Using a single case experimental design (SCED), a total sample of 12 participants started a 6-session intervention and only nine completed the intervention. The phase had four data time points, namely, baseline, intervention, post-intervention, and three-month follow-up. The clinical assessments used were the Post-traumatic Symptom Scale Interview for DSM-5 (PSSI-5), the Post-traumatic Stress Disorder Checklist for DSM-5 (PCL-5), the Beck Depression Inventory second edition (BDI-II), and the Beck Anxiety Inventory (BAI).
Considering the results of the brief PE intervention, I reject the null hypothesis, and the research hypothesis has not been falsified, which is that trauma survivors who complete six sessions of brief PE had statistically significant reduced PTSD symptoms ($p < 0.001$) and maintained their symptom reductions at three-month follow-up.

The third aim of the study was to explore the acceptability of PE in a South African context, which was to explore how trauma clients ($n = 7$) who present with symptoms of traumatic stress experience a brief prolonged exposure treatment for PTSD. Using TA, phase 3 produced a total of six themes grouped under two superordinate themes that highlighted the experiences of persons receiving PE as a trauma therapy at a community counselling centre.

The superordinate theme implementation of PE consisted of the following: room for improvement: “it’s nice to hear that it’s not your fault”, obstacles: “cure my problem”, and gender: “talking about my experiences with a man”. The second superordinate theme, adapting to PE, consisted of the following themes: PE structure: “all my issues”; exposure: “are we really going to deal with my issues here”, and noticing change: “I’m actually dealing with things”. Overall, the study found that brief PE is a feasible treatment to disseminate and implement in a South African context for the treatment of PTSD among adults at a primary care level but need to consider the social context factors.
Opsomming

Die studie het die uitvoerbaarheid van die gebruik van langdurige blootstellingsterapie (PE) vir Posttraumatische stresversteuring (PTSD) in Suid-Afrika ondersoek. Ek het ’n gemengdemetode-studie gebruik om die breë doel – om PE binne ’n Suid-Afrikaanse konteks te implementeer – na te vors en vas te stel of dit beide uitvoerbaar en aanvaarbaar binne ’n Suid-Afrikaanse konteks sou wees. Die studie het drie doelstellings gehad.

Die eerste doelstelling was om die ondervindings en perspektiewe van traumaberaders wat PSTV in gemeenskappe met min hulpbronne behandel, asook hul houding teenoor die gebruik van PE binne ’n Suid-Afrikaanse konteks, te ondersoek. Met die gebruik van Tematiese Analise (TA), het 18 beraders in semi-gestrukureerde individuele onderhoute wat oor vier gemeenskapsberadingsentrum in die Wes- en Oos-Kaap in Suid-Afrika strek, deelgeneem. Die eerste doelstelling het agt temas, wat verder onder drie oorkoeplende temas gegroepeer is, gewelor. Dié oorkoeplende temas was om as ’n berader te werk en het uit die volgende temas bestaan: trauma-vertellings wat teëgekom word, maatskaplike ondersteuning en veerkrachtigheid, traumabehandeling, en ’n kollektiewe benadering. Die tweede oorkoeplende tema was trauma binne die maatskaplike konteks, wat uit die temas: hulpeLosheid en maatskaplike faktore, bestaan het. Die finale oorkoeplende tema was ondervindinge van groei wat die temas: om andere te help genees en bemagtiging, ingesluit het.

Die tweede doelstelling van die ondersoek het die effektiwiteit van kort PE terapie vir die behandeling van PTSD by twee gemeenskapsberadingsentrum in die Wes- en Oos-Kaap in Suid-Afrika nagevors. Met die gebruik van ’n enkelvoudige eksperimentele ontwerp (SCED), het ’n totale steekproef van 12 deelnemers 6 intervensiesessies begin en slegs 9 het die sessies voltooi. Die fase het vier datatydpunte gehad, naamlik basislyn, intervensie, post-intervensie en drie maande opvolg. Die kliniese assesserings wat gebruik was, is die Post-
traumatiese simptoom-onderhoud vir DSM-5 (PSSI-5), die Kontrolelys vir post-traumatiese stresversteurings vir DSM-5 (PCL-5), die tweede uitgawe van die Beck Depressie inventaris (BDI-II) en die Beck Angstigheidsinventaris (BAI).

Die resultate van die kort PE-intervensie in ag geneem, verwerp ek die nul-hipotese en die navorsingshipotese is nie vervals nie – wat aandui dat diegene wat trauma oorleef het en ses sessies van kort PE voltooi, statisties beduidend verminderde PTSD-simptome gehad het (p < 0.001) en hul simptoomvermindering teen drie maande opvolg, handhaaf het.

Die derde doelstelling was om die aanvaarbaarheid van PE binne ’n Suid-Afrikaanse konteks te ondersoek, naamlik hoe traumakliënte met simptome van PTSD kort langdurige blootstellingsterapie vir PTSD ervaar. Met die gebruik van IFA, het fase drie ’n totaal van ses temas onder twee oorkoepelende temas – wat die ervaringe van diegene wat PE as traumaterapie by ’n gemeenskapsberadingsentrum uitgevoer het – gegroepeer.

Die implementering van die oorkoepelende tema van PE bestaan uit die volgende:
ruimte vir verbetering: “dit is goed om te hoor dat dit nie jou skuld is nie”, struikelblokke: “genees my van my probleem”, en geslag: “om my ervaringe met ’n man te deel”. Die tweede oorkoepelende tema, met die aanpassing tot PE, het die volgende temas ingesluit: die struktuur van PE: “al my probleme; blootstelling: “gaan ons werklik hier my probleme hanteer”, en verandering of vordering wat oplet is: “ek is werklik besig om werk te maak van my probleme.”

In geheel het die studie bevind dat die gebruik van kort langdurige blootstellingsterapie (PE) vir Posttraumatiese stresversturing (PTSD) binne ’n Suid-Afrikaanse konteks uitvoerbaar is vir die behandeling van PTSD in volwassenes op ’n primêre sorgvlak, maar dat die maatskaplike konteksfaktore in ag geneem moet word.
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Dedication

Reylisha Riolene Booysen

Ikhara Ikharaśīb - Khoekhoe
(Be the change)
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<td>APA</td>
<td>American Psychological Association</td>
</tr>
<tr>
<td>BAI</td>
<td>Beck anxiety inventory</td>
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<td>BDI-II</td>
<td>Beck depression inventory-II</td>
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<td>CBTs</td>
<td>Cognitive behaviour therapies</td>
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<tr>
<td>CIDI</td>
<td>Composite international diagnostic interview</td>
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<tr>
<td>CMD</td>
<td>Common mental disorder</td>
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<tr>
<td>CPT</td>
<td>Cognitive processing therapy</td>
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<tr>
<td>CT-PTSD</td>
<td>Cognitive therapy for posttraumatic stress disorder</td>
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<td>DSM</td>
<td>Diagnostic and statistical manual for mental disorders</td>
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<td>EPT</td>
<td>Emotional processing theory</td>
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<td>ESTs</td>
<td>Empirically supported treatments</td>
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<td>EBTs</td>
<td>Evidence-based treatments</td>
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<tr>
<td>EBIs</td>
<td>Evidence-based interventions</td>
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<tr>
<td>EMDR</td>
<td>Eye-movement desensitisation and reprocessing</td>
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<tr>
<td>HIC</td>
<td>High-income country</td>
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<tr>
<td>HPCSA</td>
<td>Health Professions Council of South Africa</td>
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<tr>
<td>IPT</td>
<td>Information processing theory</td>
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<tr>
<td>LMIC</td>
<td>Low- and middle-income country</td>
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<td>NET</td>
<td>Narrative exposure therapy</td>
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<td>PC-PTSD</td>
<td>Primary Care – Posttraumatic stress disorder</td>
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<td>PCL-5</td>
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SAHRC  South African Human Rights Commission
SRT    Stress response theory
SAT    Shattered assumptions theory
SLT    Social learning theory
SCED   Single case experimental design
TA     Thematic analysis
TF-CBT Trauma-focused cognitive behavioural therapy
TFT    Trauma-focused treatment
WHO    World Health Organization
WMH    World Mental Health Survey
## Glossary

**Acceptability:** The perception among implementation stakeholders that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory.

**Cognitive avoidance:** Distraction strategies such as pretending to be somewhere else, distorting a fearful image, concentrating on non-feared elements of a situation, and so on, diminish encoding of fear-relevant information and thus impede activation of fear.

**Emotional processing:** The processing of trauma related content after the completion of imaginal exposure, for example, probing emotions and thoughts related to the trauma memory.

**Feasibility:** If a task or an action can be performed relatively easily or conveniently given existing resources and circumstances.

**Habituation:** The gradual process of symptom reduction within and across sessions due to imaginal exposure.

**Trauma memory:** The memory related to the actual traumatic event.

**Over-engagement:** The client’s difficulty during imaginal exposure maintaining a sense of safety and grounding in the present moment.

**Over-engagement:** A client’s difficulty in accessing the emotional components of the trauma memory.
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Articles and Conference Presentations

The following academic papers and conference presentations have originated from this doctoral research:

**Peer-reviewed journal articles:**


**National and international conferences:**


International Society of Traumatic Stress Studies conference in Boston, Massachusetts, USA, from 13–16 November 2019.
Chapter 1

Introduction

1.1 Psychological trauma in South Africa

South African society has a history of violence and traumatisation (Kaminer & Eagle, 2010). The former apartheid government implemented widespread practices of systemic violence and psychological denigration of persons by means of political violence (Hamber, 2009). It is estimated that 200 000 South Africans were physically assaulted, tortured and detained between 1960 and 1992 (Chapman & Van der Merwe, 2007). During the mid-1970s, political violence escalated to an average of 44 killings a month, with an increase of 86 fatalities in the mid-1980s, and by the early 1990s up to 250 South Africans were dying per month from physical attacks (Hamber, 2009). To this end, the aftermath of political violence in South Africa was described as a “complicated traumatic cocktail” (South African Truth and Reconciliation Commission, 1998, Volume 1, p. 365 as cited in Hamber, 2009).

In response to the violence and traumatisation during and after the apartheid era, organisations such as Detainees Treatment Team (DTT), Organisation for Appropriate Social Services in South Africa (OASSA), and the South African Health Workers Congress (SAHWCO), among others, provided support to the affected persons and communities (e.g., Hamber, 2009). Notably, the Trauma Centre for Survivors of Violence and Torture (hereafter referred to as the Trauma Centre), which is also one of the research sites of the study, provided essential trauma-focused services to persons and communities within the Cape Town area.

The Trauma Centre was established in 1993 in Woodstock, Cape Town and played a pivotal role during and after the violent and political instability in South Africa. For example,
before it was known as the Trauma Centre, the organisation provided a reintegration programme for political detainees during the 1980s. During the late 1990s, counselling services were made available to Cape Town based victims of apartheid who participated in the Truth and Reconciliation Commission (TRC), and the organisation provided trauma counselling services during the 2008 xenophobic attacks in South Africa (www.traumacentre.org.za). Therefore, the Trauma Centre, as with other similar organisations, has been consistent in its advocacy and provision of trauma-focused interventions within the Cape Town area and the broader South Africa.

Twenty-five years on, the need to disseminate and implement empirically supported trauma-focused treatments for posttraumatic stress disorder (PTSD) in South Africa remains a priority. The South African Stress and Health Study (SASH) is a nationally representative survey of South African adults using the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI) to assess for common mental disorders (CMDs), such as the prevalence of PTSD, among South African adults (Williams et al., 2004).

The SASH study found that trauma exposure in contemporary South Africa among the general population is estimated at 78.3% in a total sample (n = 4351). Men were more prone to experiencing criminal-related traumas (e.g., assault or torture) and women reported more traumas related to intimate partner violence (e.g., sexual assault) (Williams et al., 2007). The lifetime prevalence of PTSD, at the time of the study, was 2.3% in the general South African population, with the majority of the sample (55.6%) reporting to have witnessed and or experienced multiple traumas (Williams et al., 2007). To this end, PTSD is considered a public health concern in South Africa (Atwoli et al., 2013; Kagee, Bantjes, & Saal, 2017; Koenen et al., 2017; Williams et al., 2007).

The South African Human Rights Commission (SAHRC) found that there is considerable under-investment in mental health services in present-day South Africa, and that
systemic failure to implement mental health policy has perpetuated the depraved state of mental healthcare in South Africa (SAHRC, 2019). De Kock and Pillay (2017) conducted a situation analysis of psychological services in rural South Africa and found that even with a slight improvement in access to psychological services, the treatment gap between human resources for mental illness was still as high as 85% in the public rural primary healthcare sector. Access to mental health services are also compounded by limited dissemination and implementation of empirically supported therapies (ESTs) at primary care level for CMDs such as PTSD in South Africa (Booysen & Kagee, 2020a; Kagee, 2006; Rossouw, Yadin, Alexander, & Seedat, 2018; Van de Water, Rossouw, Yadin, & Seedat, 2018).

1.2 Psychological interventions for PTSD

The World Health Organization (WHO) guidelines on the management of trauma- and stressor-related disorders highlight critical aspects related to the treatment of stressor related conditions such as PTSD in low- and middle-income countries (LMICs). Important emphasis is made regarding the obstacles that persist in impeding the adequate treatment of PTSD in the majority world. In particular, the WHO has highlighted the complexity of treating PTSD in LMICs such as South Africa where there is limited mental health infrastructure as well as insufficient trained professionals, and intervention in contexts with ongoing adversity such as poverty, gender-based violence, and increased levels of trauma exposure (WHO, 2014). Yet, empirically supported psychological treatments have increasingly been developed over the last several decades (Hamblen et al., 2019). The WHO has recognised psychological interventions as a first-line treatment for CMDs such as PTSD in LMICs (Singla et al., 2017). However, access to ESTs for PTSD at a primary care level is insufficient for the majority of people living in LMICs (Clark, 2018; Patel et al., 2018).
Globally, several trauma-focused treatments (TFTs) for PTSD for children, adolescents, and adults have been developed in high-income countries (HICs) over the past three decades (Foa, Keane, Friedman, & Cohen, 2009; Hamblen et al., 2019). These interventions include prolonged exposure therapy (PE) (Foa, Hembree, Rothbaum, & Rauch, 2019), cognitive processing therapy (CPT) (Resick, Monson, & Chard, 2016), cognitive therapy for PTSD (CT-PTSD) (Ehlers & Clark, 2000), eye-movement desensitisation and reprocessing (EMDR) (Shapiro, 1995), Trauma-focused cognitive behavioral therapy (TF-CBT) (Cohen, Mannarino, & Deblinger, 2006), and narrative exposure therapy (NET) (Schauer, Neuner, & Elbert, 2005).

Systematic reviews and meta-analyses show that PE has a substantive evidence base with multiple clinical trials conducted over the last three decades (Cusack et al., 2016; Foa & Meadows, 1997; Powers, Halpern, Ferenschak, Gillihan, & Foà, 2010; Rothbaum, Meadows, Resick, & Foy, 2000). To this end, PE was nationally disseminated and implemented as a treatment of choice in the Veterans Affairs Healthcare (VA) facilities across the United States of America (USA) (Karlin et al., 2010). Exposure therapies such as PE are endorsed by the American Psychological Association (APA) (Courtois et al., 2017) and the International Society of Traumatic Stress Studies (ISTSS) clinical practice guidelines for PTSD (Hamblen et al., 2019).

Today, PE is used to treat PTSD in the USA and other developed countries such as Japan and Israel (Foa, Gillihan, & Bryant, 2013). Foa, Gillihan et al. (2013) emphasised the need to disseminate and implement PE in developing countries with higher levels of trauma, for example, Pakistan, India, and Uganda. However, research on the effectiveness, feasibility, and acceptability of PE in LMICs such as South Africa is sparse. A search of the Pan African Clinical Trial Registry (PACTR) (see Figure 1.1) shows only one clinical trial registration for
the evaluation of PE for PTSD among adolescents in Cape Town South Africa (see Rossouw et al., 2018).

![Map of clinical trials on PTSD](https://pactr.samrc.ac.za/GIS_Viewer.aspx)

**Figure 1.1.** Pan African Clinical Trial Registry – Map of clinical trials on PTSD.

*Note: Source: [https://pactr.samrc.ac.za/GIS_Viewer.aspx](https://pactr.samrc.ac.za/GIS_Viewer.aspx)*

The recent completion of two randomised controlled trials (RCTs), one in South Africa and one in Zambia, provides initial evidence on the treatment of PTSD in LMICs such as South Africa and Zambia. Murray et al. (2015) demonstrated the effectiveness of TF-CBT (Cohen et al., 2006) to significantly reduce symptoms of PTSD and improve personal functioning in a group (n = 257) of orphans and vulnerable children (OVC) aged five to 18 years residing in a low-income community in Zambia. Murray et al. (2015) found that the mean trauma symptom score change from baseline to post-intervention was −1.54 (95% CI, −1.81 to −1.27) for the TF-CBT group and −0.37 (95% CI, −0.57 to −0.17) for the treatment as usual (TAU) group. The larger reduction in the TF-CBT group compared with the TAU group was significant (p < .001), rendering an effect size of 2.39.
The effectiveness of PE for adolescents (PE-A) (Foa, Chrestman, & Gilboa-Schechtman, 2009) was compared to supportive counselling (SC) (Rogers, 1951) for PTSD in a group of school learners aged 13 to 18 years (n = 63) in the Western Cape (WC), South Africa (Rossouw et al., 2018). Rossouw and colleagues (2018) found that PTSD symptom severity, as measured by the Child PTSD Symptom Scale - Interview (CPSS-I) significantly improved in both the PE-A and SC arms from baseline to post-treatment assessment (difference in mean scores in the PE-A group: 28.50, 95% CI 23.11–34.1, p < 0.001, d = 3.81; difference in mean scores in the SC group 17.77, 95% CI 12.41–23.1, p < 0.001, d = 1.76).

As hypothesised by the authors, an observed improvement in PTSD symptom severity in the PE-A group was significantly greater than in the SC group (difference in mean scores in the PE-A group versus SC group 12.37, 95% CI 6.82–18.17, p < 0.001, d = 1.220). For example, improvement in the PE-A group was observed from pre-treatment assessment to post-treatment assessment (p < 0.05), as well as at the 12-month follow-up (p < 0.05). At the 12-month follow-up, CPSS-I scores were significantly lower in the PE-A group than in the SC group (Rossouw et al., 2018).

Murray et al. (2015) and Rossouw et al. (2018) demonstrate that the effectiveness of evidence-based TFTs in resource-constrained contexts can reduce symptoms of PTSD in children and adolescents. Additionally, Rossouw et al. (2018) also used a task-shift approach in which they trained non-specialist health workers (NSHWs) to administer PE. The use of a task-shift approach contributes to the feasibility of PE for adolescents in South Africa. As such, the use of ESTs in low-resource settings have received continuous support from the global mental health community (Booysen & Kagee, 2020a; Murray et al., 2015; Padmanabhanunni & Sui, 2017; Patel, Chowdhary, Rahman, & Verdeli, 2011).
The above-described RCTs are but initial steps in ascertaining the effectiveness of ESTs such as PE, among others, in LMICs, therefore, it is imperative to conduct intervention research that explores not only the effectiveness, but also the feasibility and acceptability to enhance the dissemination and implementation of ESTs such as PE in LMICs.

1.3 Problem statement and rationale

Mental health services in South Africa are plagued by several challenges ranging from a lack of mental health policy implementation, a high treatment gap, limited trained mental health professionals, and limited access to evidence-based mental healthcare at a primary care level (SAHRC, 2017). In addition, trauma exposure and the prevalence of PTSD among the South African population is an increasing public mental health concern, which is exacerbated by the limited dissemination and implementation of ESTs such as PE for PTSD at a primary care level (Booysen & Kagee, 2020a; Kaminer & Eagle, 2017; Rossouw et al., 2018).

The focus on ameliorating the adverse effects of CMDs in LMICs have increased over the last decade with the advent of innovative dissemination and implementation strategies such as task-sharing and international collaborative research consortiums (Lund, Tomlinson, & Patel, 2016; Mendenhall et al., 2014; Patel et al. 2007). Yet the use of task-sharing studies for the treatment of CMDs in South Africa, except for Rossouw et al. (2018), have mostly focused on the treatment of substance-related disorders, mother-infant mental health, and depressive disorders in South Africa (Spedding, Stein, & Sorsdahl, 2015). For example, the recent completion of the Programme for Improving Mental Health Care (PRIME) in LMICs such as South Africa have precluded PTSD as a target disorder (Koenen et al., 2017). Thus, there is need for dissemination and implementation research in a South African context for the amelioration of PTSD at a primary care level (Koenen et al., 2017).
As part of the improvement of mental healthcare in South Africa, an objective of the National Mental Health Policy Framework (MHPF) and Strategic Plan 2013 – 2020 is to implement evidence-based mental healthcare for all persons in South Africa (Department of Health, 2013). Therefore, given this context and the identified problem of limited dissemination and implementation of ESTs such as PE for PTSD in South Africa, it is necessary to explore the feasibility of disseminating and implementing ESTs such as PE to ameliorate symptoms of PTSD among adults seeking treatment for symptoms of PTSD at a primary care level.

1.4 Aims of study

The broad aim of the present study was to investigate and explore the feasibility of disseminating and implementing PE as a trauma therapy for PTSD in a South African context. Therefore, the first aim of the thesis was to report on the lived experiences of trauma counsellors who provide trauma-focused services in low-resource settings in a South African context and to explore counsellors’ attitudes and knowledge toward the use of ESTs such as PE in resource-constrained communities in South Africa. The second aim was to report on the effectiveness of a brief PE intervention as a trauma therapy for trauma survivors at two counselling centres in the WC and EC of South Africa. The third and last aim of the study was to ascertain how trauma survivors from a South African context experienced PE as a TFT for PTSD. The abovementioned aims provide insights into the effectiveness, acceptability, and overall feasibility of disseminating and implementing PE as a trauma therapy for persons with PTSD in a South African context.
1.5 Research hypothesis

The study investigated the following research hypothesis:

Trauma survivors who receive six sessions of brief PE will have reduced symptoms of PTSD, depression, and anxiety at the end of treatment and maintain symptom reduction at a three-month follow-up.

1.6 Research questions

The study addressed the following qualitative research questions:

1. How do trauma counsellors experience treating persons who present with symptoms of PTSD living in a resource-constrained context, and what are the attitudes and knowledge of trauma counsellors toward the use of ESTs such as PE for PTSD in South Africa?

2. How do trauma clients who present with symptoms of traumatic stress experience a brief prolonged exposure treatment for PTSD?

1.7 Significance of research

As a pilot study, the study provides preliminary empirical data on the feasibility of disseminating and implementing PE for PTSD in South Africa. To my knowledge, the study will be one of the first to evaluate the effectiveness, acceptability, and overall feasibility of a brief PE treatment for adults who present with symptoms of PTSD at two community counselling centres in South Africa. In addition to accruing empirical evidence for the treatment of PTSD in South Africa, the study also attempts to explore the feasibility of PE as
a treatment for PTSD in low-resource settings, and how trauma survivors would experience a manualised TFT such as PE for PTSD.

On a policy level, the study will contribute to the MHPF objective of providing evidence-based mental health services for PTSD at primary care level. The thesis also promotes the importance of dissemination and implementation of PE in LMICs such as South Africa for the treatment of CMDs such as PTSD (Booysen & Kagee, 2020a).

In addition, research on traumatic stress emanating from LMICs such as South Africa is underrepresented in the national and international scholarly community, therefore, the study also contributes to the understanding of disseminating and implementing evidence-based practices for PTSD in LMIC contexts such as South Africa (Robson, Chang, & Kaminer, 2019). Lastly, the social relevance of psychology is an ongoing debate (see Long, 2016); the study highlights the need for empirical research to address public mental health issues in South Africa. The use of empirical research, alongside critical discourses, is necessary to address the public health burden in South Africa (Booysen & Kagee, 2020a).

### 1.8 Scope of the research

The use of an appropriate and feasible research design was an important consideration. The use of a mixed method approach which consisted of a single case experimental design (SCED) (Barlow, Nock, & Hersen, 2009; Kratochwill & Levin, 2010) and thematic analysis (TA) (Braun & Clarke, 2006; Clarke & Braun, 2020) was used based on the rationale of accruing preliminary data on the effectiveness and acceptability of PE for PTSD in South Africa.

Therefore, due to financial and human resources constraints, it was not feasible to use an advanced large-scale experimental design such as a randomised controlled trial. Idiographic research also has a longstanding history for preliminary studies in behavioural...
and health sciences (Barlow et al., 2009; Kratochwill & Levin, 2014). The use of an idiographic research design such as SCEDs and TA does not detract from the reliability and value of the study as idiographic designs can also enhance our understanding of not only the individual but also the group.

1.9 Thesis outline

Chapter 1 introduces the research context, problem statement, rationale of the study, aims of the study, and research hypothesis and questions, and concludes with the scope and significance of the study. Chapter 2 describes the theoretical framework of PE, which initially presents a brief history of psychological theories for PTSD followed by a discussion of emotional processing theory (EPT) as the chosen theory of the study. It should be noted that Chapter 2 primarily explores EPT, which underpins PE. Methodological principles of the qualitative phases (TA) of the study are discussed in their respective chapters 6, 7, and 9.

Chapter 3 presents an overview of international and national empirical literature on PTSD and the psychological treatment of PTSD, with a focus on PE. The chapter also highlights the limited evaluation and implementation of PE in LMICs such as South Africa. Chapter 4 describes the mixed methodology and research designs used in the study. The latter half of the chapter provides an overview of the research sites and ethical considerations of the study.

Chapter 5 presents the findings of the research question (How do trauma counsellors experience treating persons who present with symptoms of PTSD living in a resource-constrained context, and what are the attitudes and knowledge of trauma counsellors toward the use of ESTs such as PE for PTSD in South Africa?), which also includes an overview of TA as the chosen qualitative method.
Chapter 6 presents an overview of the intervention research design and procedure for the brief PE intervention. The chapter is based on the research hypothesis (*Trauma survivors who receive six sessions of brief PE will have reduced symptoms of PTSD, depression, and anxiety at the end of treatment and maintain symptom reduction at a three-month follow-up*), which also includes an overview of SCED.

Chapter 7 presents the results of the brief PE intervention. The chapter presents a discussion of idiographic visual inspection and the statistical analysis. Chapter 8 presents a discussion of the brief PE intervention. The discussion highlights pertinent aspects related to the treatment and the implications for treating PTSD using brief PE in a South African context. Chapter 9 presents the findings of research 2 (*How do trauma clients who present with symptoms of traumatic stress experience a brief prolonged exposure treatment for PTSD?*) and discusses how trauma survivors experienced PE as a treatment for PTSD.

Chapter 10 presents a summary of the results of all three phases of the study. In conclusion, Chapter 10 reflects on the study limitations and implications of the study and presents concluding comments.

### 1.10 Chapter summary

The chapter introduced the present study and described the research context, problem statement and rationale of the study, and the broad aim of the study, which is to investigate and explore the feasibility of disseminating and implementing PE as treatment for PTSD in a South African context. The chapter also emphasised the value and scope of the study, which contributes to the enhancement of mental health services using evidence-based treatment for PTSD in South Africa. The following chapter will describe the trauma theories of PTSD with a specific focus on EPT.
Chapter 2

Emotional Processing Theory

2.1 Introduction

Chapter 2 presents a brief history of psychological theories of PTSD. EPT is then discussed as the theoretical framework of the study. Based on the research hypothesis stated in the previous chapter, this chapter concludes by making a theoretical prediction of the expected outcome of the intervention based on EPT.

2.2 Brief history of psychological theories of PTSD

Since the 19th century, scholars have contributed to the conceptualisation of psychological trauma. Brewin and Holmes (2003) state that the continuous development and refinement of psychological theories have kept the field of traumatic stress grounded in a psychological understanding of trauma. These trauma theories include social-cognitive models such as stress-response theory (Horowitz, 1976), shattered assumptions theory (Janoff-Bulman, 1992), information processing theories (e.g., Beck, 1976; Beck, Rush, Shaw, & Emery, 1979; Ellis, 1979; Foa & Kozak, 1986), and learning theories (e.g., Mowrer, 1960; Wolpe, 1958; Wolpe & Rachman, 1960), which inform cognitive and behavioural therapies.

More specifically, Mowrer’s (1960) two-factor theory, which is based on Ivan Pavlov’s (1849–1936) research on conditioned reflexes (Pavlov, 1955), was instrumental in the initial understanding of fear and trauma (Foa & Rothbaum, 1998). Two-factor theory is considered to be the foundation of exposure therapy as it not merely explains the acquisition of fear but also how it could be ameliorated through exposure until the subjective anxiety subsides (Foa & Rothbaum, 1998; Servatius et al., 2015).
Cognitive theorist (Beck, 1976; Beck, Rush, Shaw, & Emery, 1979; Ellis, 1979), hypothesised that negative interpretations of arbitrary events can precipitate emotional distress and that emotions were linked to certain maladaptive thoughts. In the case of PTSD, cognitive theorists hypothesise that trauma survivors are preoccupied by thoughts of danger and threat. That is, they do not discriminate between safe and unsafe situations, and a self-attributed belief of incompetence is linked to their behaviour during the traumatic event. These cognitive processes maintain the traumatic symptoms of PTSD (Beck, Emery, & Greenberg, 1985; Foa & Rothbaum, 1998).

In addition, schema-based models emphasise how cognitive schemas or core beliefs mediate the psychological process of a traumatic event. Epstein (1991) stated that core beliefs are constellations of thoughts about one’s safety and security in the world, sense of meaning, self-worth, and the trustworthiness of other people. Yet, a schema or core belief of a person who survives a traumatic experience is adversely affected. The experience of the traumatic event is deemed incongruent with the core belief of the individual (i.e., the belief that the world is a safe place is contrary to the event of a physical assault). The inability to reconcile the content of a traumatic event with an existing schema is hypothesised to cause symptoms of traumatic stress (Epstein, 1991; Janoff-Bulman, 1992).

Contemporary theoretical developments of PTSD include dual representation theory (Brewin, Dalgleish, & Joseph, 1996), which incorporates both information processing and social-cognitive theories and introduces research and theory from cognitive science regarding memory processing in trauma. The conscious and non-conscious processing provides an explanatory framework for the psychopathology of trauma. Dual representation theory proposes two, or dual, memory systems, namely, Verbal Access Memory (VAM) and Situational Access Memory (SAM) (Brewin et al., 1996). These memory systems represent the conscious and non-conscious processing of the traumatic experiences related to emotional
memory. VAM can be deliberately retrieved and contains some sensory information, information about emotional and physical reactions, and the personal meaning of the event. The second memory system, SAM, is more extensive in autobiographical memories of the event, which cannot be accessed deliberately, and is not as easily altered or changed as the more easily accessible VAM.

The second is Ehlers and Clark’s cognitive model of PTSD, which emphasises the peculiarity of present or future threat when a traumatic event is in the past (Brewin, 2003). Ehlers and Clark (2000) claim that the onset and maintenance of PTSD is due to certain cognitive distortions, namely, (a) negative appraisals of the event, (b) the sequelae or nature of the event, and (c) thought processes and beliefs prior to and during the traumatic event.

The cognitive model for PTSD is largely based on the principles of information processing.

In the present study, emotional processing theory by Foa and Kozak (1986) is used to conceptualise the intervention in the present study.

### 2.3 Emotional Processing Theory

EPT (Foa & Kozak, 1986; Foa et al., 2019) is used in the present study, which is rooted in the cumulative evidence of behaviour therapy, cognitive behaviour therapy, and learning theory (e.g., Beck, 1976; Foa & Kozak, 1986; Lang, 1968, 1977; Mowrer, 1960; Wolpe, 1952, 1958, 1969; Wolpe & Rachman, 1960). EPT is an empirically supported theory that informs the conceptualisation and treatment of PTSD (e.g., Foa & Kozak, 1985; Foa & Kozak, 1986; Foa & Riggs, 1993; Foa & Rothbaum, 1998).

Foa and Kozak (1985, 1986) adopted Lang’s (1977) bioinformation theory, which is a building block in the development of EPT’s conceptualisation and treatment of anxiety disorders and PTSD (Foa & Kozak, 1986). Bioinformation theory posits that persons who have a pathological fear of an object or place develop a cognitive fear structure. The fear
structure contains three components, namely information about the feared stimulus (e.g., dogs); information about the verbal, physiological, and overt behavioural responses (heart palpitations); and interpretive meaning of the feared stimulus (e.g., dogs will hurt me) and responses (e.g., I must run away). Based on these components, the fear structure serves as a programme for escaping feared situations (Lang, 1977).

2.4 Emotional Processing Theory: Fear structure of PTSD

According to Foa, Steketee, and Rothbaum (1989), the pathological fear structure of PTSD contains excessive stimulus, response, and pathological meaning elements (see Figure 2.1). For example, a person who survives a physical assault could, theoretically, develop a fear-response to persons or situations who vaguely resemble the perpetrator. The fear structure of PTSD is underpinned by two cognitive conditions: (a) the trauma survivor will have erroneous beliefs about his or her safety in the world; and (b) behaviours and physiological reactions during the traumatic event will lead to doubt regarding self-efficacy and competence (Foa et al., 1989; Foa & Jaycox, 1999; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999).
2.5 Modifying the fear structure

Foa and Kozak (1986) posit that fear and anxiety are embedded in memory structures, and when activated through stimuli, precipitate symptoms of PTSD. It is necessary that the fear structure be activated to modify the erroneous elements contained in the structure (Foa & Kozak, 1986). By using exposure procedures such as imaginal exposure and in vivo exposure, fear-relevant information which is aligned to the traumatic event must be presented in order to achieve activation of the trauma memory (Foa et al., 1986; Rauch, Foa, Furr, & Filip, 2004). For example, clients would verbally recount the trauma memory in the present tense to activate the trauma memory, and this will be repeated several times during the session.

Accessing a fear structure requires careful attention to how and what information is presented to the client. Inappropriate or non-matching information can result in weak or no activation and can impede the amelioration of the trauma symptoms; this is known as under-engagement (Foa & Rothbaum, 1998). According to Foa and Rothbaum (1998), the
modification of a fear structure is premised on Piaget’s cognitive development theory of 1954: accommodation and assimilation. It is important to note that modification of a fear structure does not denote a change in the fear structure per se, but rather the creation of a new or competing non-pathological structure (Foa & McNally, 1996).

Therefore, it is necessary to assess and monitor the level of activation and engagement during exposure. According to Foa and Kozak (1986), the activation of a fear structure can be assessed by self-reports and observations linked to the physiological reactions of the client, for example, increased breathing or subjective reports of distress. In monitoring levels of distress, a therapist can mitigate the possibility of over-engagement which would also impede adequate processing of the trauma memory. It is also necessary to consider how coherently the client reports the traumatic event, as incoherence or evasiveness to engage in the detail will impede the emotional processing during treatment; this is known as cognitive avoidance (Foa & Kozak, 1986). Earlier research found that both in vivo and imaginal exposure are necessary for greater treatment gains, as research conducted only using in vivo exposure had more relapses when only using one of the two (Foa, Steketee, Turner, & Fischer, 1980). Therefore, EPT recommends both in vivo and imaginal exposure techniques for the treatment of PTSD symptoms.

2.5.1 EPT: Habituation

Habituation is the gradual reduction of a stress-related response associated with procedures such as imaginal exposure (Foa & Rothbaum, 1998). As previously mentioned, during treatment, the fear structure will be activated by engaging with fear-relevant information (in vivo and imaginal exposure), as this is necessary to modify the erroneous elements contained in the fear structure (Foa et al., 2019). According to EPT (Foa & Kozak, 1986; Rauch & Foa, 2006), it is advantageous for clients to display and report with an
increased level of emotional and physiological reactivity, which is indicative of an activated trauma memory which can allow for processing and habituation to occur.

Initial research on EPT hypothesised that short-term within session habituation was necessary as a predictor of a positive treatment outcome (Foa & Kozak, 1985, 1986; Foa & Rothbaum, 1998). For example, whilst engaging in exposure during a session, the Subjective Units of Distress (SUD) are expected to decrease by the end of a session. Yet research found that within session habituation is not necessary nor is it an indicator of a positive treatment outcome (Baker et al., 2010; Craske et al., 2008; Foa et al., 2019).

However, habituation across sessions has been found to be a good predictor of a positive treatment effect (Foa et al., 2019). Therefore, across session habituation should be observed and reported by a client. For example, the client should report a higher level of emotional and physiological reactivity at the start of treatment compared to the latter phase of treatment.

Foa and Kozak (1986) state that, due to the process of habituation, persons tend to realise that the meaning attached to the stimulus-response is not as intense as initially believed before the start of treatment. This realisation is due to the corrective and incompatible information given during fear activation in treatment. For example, the three initial conditions, such as negative valence, are altered throughout short-term and across session habituation. The client might hold an irrational belief that if they talk about the traumatic event, they will experience persistent symptoms of distress, but post-EPT, this irrational belief is challenged and no longer held to be true. The negative valence of the client develops into a positive experience as they realise that the perceived outcome that is linked to the fear structure is weakened. The client does not only experience habituation, but also positive valence towards the stimuli and response due to exposure. Overall, this process of engagement is also referred to as emotional processing where the client and therapist reflect
on thoughts and emotions that arose during exposure. Emotional processing allows the client to evaluate thoughts and the process difficult emotions related to the traumatic experience.

**2.5.2 Treatment challenges and limitations**

Foa and Kozak (1986) identified four client characteristics that can prevent emotional processing during therapy. First, cognitive avoidance (motivated inattentiveness) is active and decisively engages in cognitive strategies to avoid or reduce the amount of activation of the fear structure during treatment. For example, a client may report a distorted image, recount a traumatic event, or mentally engage in a different thought. Cognitive avoidance prevents emotional processing and modification of the trauma memory cannot occur (Foa & Kozak, 1986).

Secondly, affective states such as severe depression and anger have been found to have an adverse effect on emotional processing (Foa, Riggs, Massie, & Yarczower, 1995). It is hypothesised that persons with severe depression would present with learning deficits due to difficulties related to self-efficacy and affective states of hopelessness, and cognitive biases which may prevent encoding corrective information that can weakening the stimulus-response links in the fear structure (Foa & Kozak, 1986). In the case of high levels of anger, it is recommended that clients focus on the affective processes of fear rather than on anger during imaginal exposure, as this will enable emotional processing to occur (Foa et al., 1995).

Third, overvalued ideation, which presents as a persistent resistance to encode corrective information, serves as another complication in treatment. Foa (1979) found that persons who overvalue the erroneous thoughts present with elaborate justifications against the rational evidence that disconfirms erroneous ideas through corrective information.

Lastly, presence of under-engagement and over-engagement in treatment can impede habituation and the overall outcome of treatment. Persons who under-engage are suggested to
have low emotional connectivity, are disconnected from the trauma memory, and are hasty during exposure and processing. Persons with high levels of arousal (over-engagement) when presented with fear-relevant information have been found to present with lower levels of habituation. The high-intensity of stimuli over-engagement during activation disallows the person to encode corrective information in the fear structure, therefore, inadequate levels of habituation occur, which, in turn, results in low treatment outcomes (Foa & Kozak, 1986; Foa et al., 2019). These challenges, as delineated by EPT, must be considered in the amelioration of trauma symptoms.

2.6 Theoretical prediction

PTSD is characterised by maladaptive functioning, which can be observed in cognition, affect, and overt behavioural phenotypes (American Psychiatric Association, 2013). According to EPT, PTSD is maintained due to severe avoidance and erroneous cognitions about oneself and the world (Foa et al., 2019; Kozak, Foa, & Steketee, 1988). In response to the psychological sequelae of trauma, EPT posits that the activation of the fear memory structure and incorporation of competing information against irrational thoughts will ameliorate distress which will be observed in the cognition, affect, and behaviour of the person. Based on EPT, it is hypothesised that participants of the present study should have reduced symptoms of PTSD when engaging in emotional processing during the intervention and maintain treatment gains at least three-months post-intervention. Additionally, similar positive outcomes should also be observed for the secondary outcomes of depression and anxiety.
2.7 Chapter summary

Several psychological theories have been developed to conceptualise the psychopathology of PTSD. As a result, the conceptualisation of PTSD has an empirically supported theoretical base for understanding trauma from a psychological perspective. In the present study, EPT is used to conceptualise PTSD and to guide the brief PE intervention used in phase 2 of the study. EPT will also be used to conceptualise the results and treatment process of the intervention phase.
Chapter 3

Literature Review

3.1 Introduction

This chapter reviews the development of PTSD and relevant empirical literature on psychotherapy for PTSD with an emphasis on PE. A three-phased approach was conducted to search and collate literature on clinical trials for PE and PTSD. First, a search of academic databases was conducted, including Cochrane Central Register of Controlled Trials, US National Library of Medicine – Clinical Trials, MEDLINE, PTSDpubs (National Centre for PTSD – US Department of Veterans Affairs), PsycINFO (American Psychological Association), and Scopus (ELSEVIER).

Searches were filtered for a specific period ranging from 1980 to 2020. Empirical, peer-reviewed, and published articles were considered for review on PE therapy for PTSD. The initial searches included the following keywords: “prolonged exposure”, “exposure”, “clinical trial”, “controlled trial”, “random”, “randomly”, “randomise”, “randomize”, “randomised”, “randomized”, “low income country”, “middle income country”, “low income context”, “middle income context” and alone or in combination with “posttraumatic stress disorder”, “post-traumatic stress disorder”, or “PTSD”.

Second, a manual search was conducted of high-impact journals that regularly publish outcome research on PTSD, including PE (e.g., Clinical Psychology Review, Journal of Traumatic Stress, Behaviour Research and Therapy, European Journal of Psychotraumatology, Journal of Consulting and Clinical Psychology, etc.). Lastly, meta-analyses and critical review studies on the efficacy and effectiveness of PE for PTSD were reviewed to identify any literature omitted from the first two steps. In addition, research websites such as Mendeley, ResearchGate and Academia.edu were searched to find
additional literature on PE for PTSD. The literature review is organised into four broad themes, viz. the development of psychological trauma and PTSD, the prevalence of PTSD, the treatment for PTSD, PE for PTSD, and the dissemination and implementation of PE for PTSD in LMICs. One month before the submission of the thesis for examination, a literature update was conducted to include any new and relevant publications. This was done based on a manual search of previously searched scientific journals and databases.

3.2 A brief history of psychological trauma

Evidence of psychological trauma can be found in biblical and classical works such as Deuteronomy 20:1-9, the epic tale of Gilgamesh, and the battle of Marathon by Herodotus, written in 440 BC (Crocq & Crocq, 2000; Shauer & Ebert, 2010). Early evidence of psychological trauma was also found in the 16th century writings of Shakespeare’s King Henry IV, Charles Dickens, and in the Diary of Samuel Pepys (Trimble, 1985; Young, 1995).

In the 19th century, the initial conceptualisation of trauma was confined to physical injury and was known as railway spine by the British physician, John Ericshen, in his 1886 book titled, On railway and other injuries of the nervous system (Horowitz, 2001). The notion of railway spine, which was later known as railway brain, was based on the presumed aetiology of micro lesions in the brain and or spinal cord (Fassin & Recthman, 2009). The concept railroad spine was later changed to trauma neurosis by German psychiatrist, Oppenheim (Fassin & Recthman, 2009).

During the period of Erichsen, the possibility of a psychological aetiology was not considered. The writings of Jean-Martin Charcot (1825–1893) led to the inception of trauma being understood as psychological distress, and not merely as a physical phenotype of distress (Horowitz, 2001). Charcot’s work on hysteria in 1889, served as a blueprint for the scholarship of Pierre Janet (1889), Breuer and Freud (1893–1896), which further explored the
psychological sequelae of trauma or post trauma neurosis (Trimble, 1985). Psychoanalytic thinkers such as Freud understood traumatic stress, or hysteria, as the somatic manifestations of past traumatic experiences that were rooted in the unconscious that resulted in somatic symptoms (Van der Kolk, Weisaeth, & van der Hart, 1996).

Despite the initial interest in psychological trauma in the 19th century, the significance of posttraumatic stress appeared to be sporadic during the 20th century and only came to prominence during and after World War II (e.g., Kadimer, 1941). Psychological trauma was largely related to that of combatants; therefore, understandings of psychological trauma were largely circumscribed to war-related traumas. Concepts such as war neurosis, shell shock, soldier’s heart, battle exhaustion, and battle fatigued were used interchangeably in the literature to refer to the psychological sequelae of trauma (Kipper, 1977; McNally, 2003a; Trimble, 1985). Additionally, non-war related concepts of trauma such as rape trauma syndrome (Burgess & Holstrom, 1974) also captured the atrocities of other trauma-related experiences such as sexual violence and rape.

Throughout the 19th and 20th centuries, the importance and relevance of psychological trauma culminated in the inception of the diagnostic construct of PTSD. PTSD entered the nomenclature of psychiatry in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III; American Psychiatric Association, 1980). Since the debut of PTSD, more than three decades ago, scholars have also critically engaged with the scholarship of PTSD (McNally, 2003b; 2016). Several facets of PTSD have been criticised over the last three decades, namely, the ontological credence of PTSD (Young, 1995, 2016), the social and cultural applicability of PTSD in non-Western contexts (Herman, 1992; Summerfield, 2001; van der Kolk, 2005), the nature of trauma memory (McNally, 2003a), and concept or bracket creep (Haslam, 2016; McNally, 2003a), among others.
Critical scholarship has allowed psychotraumatologists to engage in continuous work on the scientific understanding and treatment of PTSD. For example, proponents of the natural existence of PTSD have found evidence in support of a psychobiological base for PTSD (Yehuda & McFarlane, 1997), the cultural applicability of PTSD in non-Western societies (Kagee, 2004; Osterman & de Jong, 2007), and the advancement of theoretical models, e.g., network analysis, to explain the psychopathology of PTSD (Borsboom & Cramer, 2013). Despite the history of challenges linked to PTSD, it remains an area of research which receives sustained attention from the scholarly community and civil society (McNally, 2012).

3.3 Prevalence of PTSD

Epidemiological research shows that PTSD is a pervasive mental disorder that adversely affects the mental and physical functioning of persons across the world (Koenen et al., 2017). The World Health Organization World Mental Health (WHO WMH) surveys, for the first time, presented a comprehensive report on the global epidemiology of PTSD across 24 different countries with different income levels, including South Africa (Koenen et al., 2017). The WMH survey reports on factors such as: (a) the cross-national prevalence of PTSD, (b) trauma exposure, (c) treatment seeking behaviour, (d) social determinants related to PTSD, (e) the correlation between trauma type and conditional risk, and (f) the mean symptom duration of PTSD across different trauma types (Kessler et al., 2017; Koenen et al., 2017).

Using the CIDI (Kessler & Üstün, 2004) version 3, the cross-national lifetime prevalence of PTSD is estimated at 3.9% in a total sample (n = 71 083) and 69.7% of the respondents reported of trauma exposure (TE) (Koenen et al., 2017). An interesting finding is that HICs (5.0%) have a higher prevalence of PTSD among the exposed compared to upper
middle-income (2.3%) and lower low-income countries (2.1%) (Koenen et al., 2017). This anomaly is described as the “vulnerability paradox in the cross-national prevalence” for PTSD (Dückers, Alisic, & Brewin, 2016, p. 300; see also McNally, 2018).

For example, South Africa (2.3%) has a lower lifetime prevalence of PTSD compared to the Netherlands (4.4%), but the Netherlands has a lower rate of trauma exposure (65.6%) compared to South Africa (73.8%), which seems to be a counterintuitive finding (Koenen et al., 2017). Dückers and colleagues (2016) found that aggregated or group data could cause a reverse correlation when the data is examined at an individual level. To this end, the current epidemiological research provides good insights, but hasty inferences can misconstrue the prevalence and impact of PTSD and impede the progress required to address the adverse impact of PTSD.

Even so, treatment seeking behaviour in low lower income (22.8%) countries are the lowest compared to upper middle- (28.7%) to high-income (53.5%), which results in several persons not receiving treatment for PTSD (Koenen et al., 2017). Moreover, social determinants such as younger age, female, being unmarried, being less educated, having a lower household income, and being unemployed is associated with an increased risk for PTSD among the trauma exposed (Koenen et al., 2017; McNally, 2018; Shalev et al., 2019). In the case of South Africa, social determinants such as the above-mentioned have found to increase the likelihood of PTSD with augmented levels of traumatisation in resource-constrained settings (Atwoli et al., 2013).

The conditional risk of PTSD after trauma exposure is estimated at 4% on the CIDI and varies considerably based on the trauma type (Kessler et al., 2017). The trauma types with the highest risk of PTSD are events involving intimate-partner or sexual violence (11%), with rape as the trauma type with the highest conditional risk of PTSD (19%), physical abuse by a romantic partner (11.7%), being kidnapped (11.0%), and being sexually assaulted other
than rape (10.5%) (Kessler et al., 2017; Lui et al., 2017). Considering these findings, and considering the South African context, violence against women is ostensibly ubiquitous, with sexual violence considered the most common and severe form of trauma against women (Sibanda-Moyo, Khonje, & Kyerewaa Brobbey, 2017).

The mean duration of PTSD symptoms is estimated at six years across various trauma event categories such as combat related trauma, physical violence, intimate-partner and sexual violence, motor vehicle accidents, and unexpected death of loved ones (Kessler et al., 2017). The high prevalence of PTSD has far-reaching consequences that affect the mental, physical, social, and economic well-being of persons in South Africa and globally (Herman et al., 2009; Kessler et al., 2017).

The findings of the WMH surveys emphasise the pervasive nature of PTSD and that more than half of the total sample (n = 71,083) do not receive any psychological treatment in low lower-income settings (Koenen et al., 2017). Among the number of notable findings in the WMH report is a clear need for persons suffering from PTSD to have access to effective psychological interventions, especially in limited resourced countries with complex social factors and low treatment seeking behaviour (Koenen et al., 2017). Based on the above-mentioned findings from the WMH surveys and based on the prevalence of sexual violence, and other trauma types in South Africa, it is argued that the general South African population is at increased risk for PTSD (Atwoli, Stein, Koenen, & McLaughlin, 2015).

3.4 Clinical definition of PTSD

Since DSM-III, PTSD has been part of the classification or metastructure of anxiety disorders until DSM-IV-TR (American Psychiatric Association, 2000). DSM-5 introduced significant changes to the nosology and symptomology of PTSD. A significant change in
DSM-5 was removing PTSD from the anxiety disorders and the increase of 17 symptoms to a total of 20 (American Psychiatric Association, 2013).

The diagnostic features of PTSD require persons to have directly experienced, witnessed, or learned about the violent traumatic death of a close family member or close friend, or report to have endured prolonged exposure to trauma. Consequently, persons report to re-experience the traumatic event (i.e., intrusive thoughts, nightmares, or flashbacks) which is subjectively experienced as distressing. The effect of memory dysfunction is a salient feature of the psychological sequelae of PTSD, which is different from the symptomatology of other anxiety disorders such as phobias (Brewin & Holmes, 2003). The presence of intrusive thoughts and flashbacks is distinct to PTSD, which is largely dependent on arbitrary sensory stimuli that activate vivid mental imagery (Brewin & Holmes, 2003).

In response to the distress of re-experiencing, persons exhibit behavioural and cognitive strategies of avoiding internal (thoughts or emotions) and external (objects, places, or conversations) stimuli to cope with the traumatic stress is present. Noticeable changes in cognitions (blame of self, others, or the world) and emotions (intense feelings of fear, anger, guilt, or shame) are present, and alterations in arousal and reactivity (hypervigilant of environment and easily startled) are observed over a period of six months or longer (DSM-5; American Psychiatric Association, 2013). As a result, PTSD is commonly found among groups such as military combatants, survivors of sexual violence, physical assaults, refugees and asylum seekers, persons who have endured prolonged abuse, among others. The following sections provide a review of psychotherapy for treating PTSD.

3.5 Trauma-focused treatment for PTSD

Behavioural and cognitive therapy have a history of attempting to provide evidence-based psychological treatments for fear and anxiety related disorders (Jones, 1924; Mowrer &
Mowrer, 1938; Wolpe, 1958). According to Rachman (2015), Pavlov’s work on conditioned reflexes failed to progress to demonstrate how classical conditioning could ameliorate maladaptive behaviour, which allowed for further developments in the field of behaviour research. Exposure therapy, which is part of cognitive behavioural therapy, was advanced by the work of South African born scholars Joseph Wolpe (1915–1997) and Arnold Lazarus (1932–2013) who pioneered the treatment of fear and anxiety (Young, 2009).

The field of behaviour therapy adopted an experimental approach to psychopathology, which rejected the works of introspective or depth psychology (Rachman, 2015). The presumed effectiveness of psychoanalytic approaches could no longer be precluded from the principles of critical rationality and logic (e.g., Eysenck, 1952; Popper, 1963). For example, Eysenck’s seminal paper, together with the works of other scholars (e.g., Jones, 1924; Skinner, 1953; Watson, 1913, 1916, 1926) initiated the era of evidence-based practices in the field of clinical psychology.

Therefore, in response to the intuitive psychoanalytic approaches to ameliorating neurosis (psychological distress), scholars such as J. B. Watson (1878–1958), B. F. Skinner (1904–1990), Albert Ellis (1913–2007), Edna B. Foa (1937–), and Aron T. Beck (1921–) , among others, developed and refined cognitive and behaviour therapy to treat psychopathology such as anxiety. To this end, the impetus to establish and develop a cognitive and behavioural science in psychology was propelled by the foresight of scholars such as Jürgen-Hans Eysenck, Stanley Rachman, and Joseph Wolpe, among others (Rachman, 2015).

3.6 Development of exposure techniques for PTSD

The field of behavioural and cognitive behaviour therapy refer to a number of techniques and treatments for psychopathology (Rachman, 2015). Early scholars such as
Morganstern (1973) reported that concepts such as *flooding*, and *implosion* were used interchangeably during the early stages, which resulted in some confusion. Lyons and Keane (1989) distinguished between some of the early exposure-based techniques to highlight differences and similarities:

**3.6.1 Systematic Desensitisation (SD)**

According to Wolpe (1958), systematic desensitisation treatment is based on reciprocal inhibition (counterconditioning). Clients are required to engage in a graduated process of exposure and simultaneously engage in a deep muscle relaxation procedure. It is predicted that persons will first be distressed, but due to the competing stimulus or counter-conditioning of relaxation, anxiety should decrease over time whilst exposed to a fear stimulus such as a picture of a spider (Wolpe, 1958).

**3.6.2 Flooding therapy (FT)**

According to Morganstern (1973), the term *flooding* was coined by Polin in 1959. Similar to SD, flooding makes use of a hierarchy of scenes to precipitate anxiety but does not include counter-conditioning (i.e., relaxation) as with SD. Flooding, which is based on extinction principles (e.g., Two-factory theory), exposes a client to a number of scenes for a prolonged period until reduction is achieved (Levis, 1980; Morganstern, 1973).

**3.6.3 Implosive therapy (IT)**

According to Stamplf and Levis (1967), IT integrates the principles of learning theory with basic concepts of psychodynamic theory. Stamplf and Levis (1967) reported that the integration would allow for a new theoretical approach to treating psychopathology. Despite similarities between flooding and IT, a marked difference between flooding and IT is that
implosion will “…expose patients to unrealistic, but horrifying and vivid scenes…” compared to flooding that only presents fear stimuli.

Implosion requires an added layer of imagery detail that might not always be realistic, hence there is an exaggerate effort to achieve maximum anxiety evocation (Morganstern, 1973; Lyons & Keane, 1989; Stampfl & Levis, 1967). The focus of therapy is to “bring traumatic events to consciousness so that the fear they evoke might extinguish” (Kimble, 1961 as cited in Stampfl & Levis, 1967). Therefore, in therapy, clients are presented with hypothesised scenes. Clients are encouraged to be themselves and to “lose himself” or herself in the implosive procedure (Stampfl & Levis, 1967, p. 500). The therapist attempts to achieve a maximum amount of anxiety evocation in the client. During maximum anxiety, the client is held at that level until a spontaneous reduction (implosion) in anxiety occurs (Morganstern, 1973; Stampfl & Levis, 1967).

3.7 Exposure therapy for PTSD: 1960–1980s

Prior to the inception of PTSD as an official psychiatric disorder in 1980, no outcome research existed on the effective treatment of psychological trauma (Cooper & Clum, 1989). Literature during the early to mid-1900s focused on conceptualisations of psychological trauma, and scholars seldom focused on evaluating treatment efficacy and effectiveness for psychological trauma (e.g., Kardiner & Spiegel, 1947). The advent of cognitive and behavioural therapies (CBTs) during the 1950s enabled researchers to investigate different treatment for trauma and stressor-related conditions such as PTSD.

For example, Kipper (1977) reported positive outcomes of SD, which is a CBT technique, for persons with anxiety-related and fear-based conditions. Contrary to psychoanalytically orientated treatments, Kipper (1977) found that SD yielded clinically positive outcomes for persons experiencing symptoms of traumatic stress, or war-induced
fear as it was then known. Initial studies conducted in the 1960s and 1970s brought about a change in treatment approaches, and scholarly critique and debate (e.g., Levis, 1974; Morganstern, 1973) about methodological sophistication, theoretical clarity, and ethical practice propelled the field of CBT to maintain an evidence-based and experimental stance towards treatment of psychopathology.

Research during the 60s to 80s used SCEDs and case reports to evaluate the treatment effect of exposure therapy for PTSD. Keane and Kaloupak (1982) conducted one of the first empirical studies using imaginal flooding (IF) (Levis & Hare, 1977). Keane and Kaloupak (1982) used a SCED for PTSD with comorbid alcohol use in a 36-year-old African American Vietnam veteran. The study evaluated the effect of IF to reduce symptoms of PTSD in a controlled psychiatric context. After 19 sessions of IF, the participant reported reduced anxiety symptoms on the Spielberger State Anxiety Inventory (STAI) (Spielberger, 1983) and overall functioning at three- and 12-month follow-up improved. This study not only found the use of exposure to be effective, but also served as a guide for future intervention studies.

Building on the initial research of Keane and Kaloupek (1982), scholars began to investigate the treatment specific symptoms clusters of PTSD (i.e., intrusive or avoidance symptoms). Contrary to the Keane and Kaloupek (1982) study in a psychiatric context, Fairbank and Keane (1982) explored exposure therapy for PTSD in a real-world context of how to treat persons who present with multiple traumatic events. A small sample of two Vietnam War veterans had five weekly sessions of IF. Keane and Fairbank (1982) reported that the use of IF for a specific trauma memory (i.e., high jacking) could also reduce symptoms for other related trauma memories (i.e., physical assault).

For example, treating someone who reports multiple (but slightly different) physical traumas can have reduced symptoms for a secondary trauma memory. However, they
cautioned that trauma memories should have similar stimulus and response cues. The study showed that behaviour therapy could potentially have a positive outcome for more than one trauma memory, which demonstrated the initial effectiveness and feasibility of exposure treatment in real-world contexts.

Black and Keane (1982) expanded the reach on exposure therapies for persons reporting symptoms of traumatic stress in the early 1980s. Black and Keane (1982) sought to assess the efficacy of exposure therapy in a specific population of older veterans of war with a longer morbid history of traumatic stress. The study recruited a male veteran who had reported a comorbid history of PTSD, agoraphobia, marital discord, and alcohol use disorder. The symptom duration of PTSD was reportedly more than 30 years and a history of alcohol abuse during the last 10 years. Using IF, the participant had reduced symptoms of anxiety after an intervention of three sessions. Black and Keane (1982) reported that the participant was asymptomatic at two-year follow-up. The results of the study were based on therapist and client’s self-reports and observations.

These initial studies from the 1960s to 1980s on psychological trauma, although small scale intervention studies, had promising outcomes with diverse sample characteristics and contexts. These studies laid a foundation for further research that focused on more sophisticated efficacy and effectiveness outcome studies.

To advance the evidence-base, rigorous methodological designs were necessary to ensure the reliability and validity of the results. The latter half of the 1980s produced larger scale research on the efficacy of exposure therapy for PTSD. In a review conducted by Foa and Meadows (1997), methodological guidelines of high-quality intervention research were outlined. According to Foa (1991), one of the first “gold standard” studies was by Keane, Fairbank, Caddell, and Zimering (1989) in treating Vietnam War veterans using IF against a wait-list condition. The treatment effect of implosive flooding on symptoms of PTSD
produced statistically significant reduction of symptoms of startled response, memory, and concentration \( (p < .05) \), and to a lesser extent, guilt \( (p < .06) \), and were maintained at follow-up.

Relatedly, Cooper and Clum (1989) observed the accumulating efficacy of IF during the early 1980s. The authors observed that previous studies did not directly compare IF to another treatment. The authors used IF as an adjunct to individual and or group psychotherapy for PTSD in a Veteran Affairs (VA) health centre compared to a control group of standard VA healthcare individual and group therapy. The study found that IF as an adjunctive augmented the treatment outcome of the standard treatment of group or individual for PTSD in a sample of seven combatants. According to the authors, this was another step towards demonstrating the effectiveness of exposure therapy for PTSD. In addition to finding that IF augmented efficacy of TAU, Cooper and Clum’s (1989) recommendation that IF as a stand-alone treatment may have adumbrated the forthcoming developments in exposure therapies for PTSD.

The literature on cognitive behavioural treatments for PTSD steadily increased during the 1980s but was still limited due to methodological quality (Foa & Meadows, 1997). Foa and Kozak (1997) reflected on the initial optimism of cognitive and behaviourists to provide simplified solutions to complex human psychopathology. Outcome studies on psychotherapy for PTSD during the 1980s signalled a need for continuous investigation because absolute efficacy was not attainable (Foa & Kozak, 1997). The subsequent decade produced intervention studies of higher methodological quality which propelled the evidence base of CBT treatments such as PE therapy for PTSD.
3.8 Prolonged exposure therapy for PTSD

Outcome research during the 1980s had insufficient studies with control groups or randomisation (cf. Keane & Kaloupek, 1982) (Fairbank & Keane, 1982), or non-specific therapeutic control (i.e., SC) to compare the experimental condition (cf. Keane et al., 1989) (Foa & Meadows, 1997). The advent of the 1990s produced outcome studies with improved methodological designs for the treatment of PTSD (e.g., Boudewyns, Hyer, Woods, Harrison, & McCranie, 1990; Foa, Dancu et al., 1999; Foa, Rothbaum, Riggs, & Murdock, 1991). The following section of the review discusses key clinical trials of PE for PTSD.

3.8.1 Initial RCTs for PE

During the 1990s, researchers sought to address the treatment of specific trauma-related disorder among specified populations other than war veterans. One such area of research was treating female rape survivors. Based on several behavioural and exposure techniques, PE therapy mainly consisted of psychoeducation, calm breathing, imaginal exposure and in vivo exposure to treat symptoms of PTSD (Foa & Kozak, 1986; Foa & Rothbaum, 1998).

Initial attempts at evaluating the efficacy and effectiveness of PE involved comparing PE to Stress Inoculation Training (SIT) and SC. SIT (Meichenbaum, 1975) is a flexible cognitive behavioural therapy that consists of practical skills (i.e., deep muscle relaxation or self-guided talk) and psychoeducation to manage different forms of distress (Meichenbaum, 2017). SC is a non-directive psychotherapy that was developed by Carl Rogers (1951). SC, also known as person-centred therapy, is based on therapeutic principles of unconditional positive regard towards the client, empathy, congruence, and a belief that the client has the inherent capacity to self-actualise given the correct conditions in a therapeutic relationship (Rogers, 1951).
Foa et al. (1991) compared PE to SIT and SC in a sample of female rape survivors (n = 45) with PTSD. The three active conditions were compared against a wait-list (WL) group with a sample (n = 10) of female rape survivors. Using sample randomisation, 14 participants were assigned to the SIT condition, 10 participants to the PE condition and 11 to the SC condition.

Active conditions received nine weeks of bi-weekly sessions of 90 minutes duration. Participant symptomology was measured at pre-treatment, post-treatment, and three month-follow-up. Symptom measurement was completed by an initial interview that explored symptoms across daily functioning, trauma, and drug use, among others. Self-report measures consisted of the Rape Aftermath Symptom Test (RAST) (Kilpatrick, 1988), State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, & Lushene, 1970), Expectancy of Therapeutic Outcome, Beck Depression Inventory (BDI-II) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), and Motivation for Behaviour Change Scale (MBCS) (Cautela, 1977).

Pre- and post-treatment results showed the SIT had an overall greater treatment effect compared to PE, SC, and WL. However, when immediate post-treatment results were compared to a three-month follow-up, participants in the PE (p < .07) condition showed a tendency for greater improvement compared to the other two active conditions. Foa et al. (1991) hypothesised that SIT’s practical procedures allowed for immediate amelioration or containment of the distress. However, PE’s focus on imaginal and in vivo exposure, which leads to correcting of erroneous cognitions, had a longer lasting effect (Foa & Kozak, 1986).

The findings of the above-described study led to a follow-up study that evaluated PE combined with SIT. Foa, Dancu et al. (1999) hypothesised that SIT and PE would have a greater treatment effect on PTSD. A sample (n = 96) of female victims of sexual assault and non-sexual assault were recruited and randomly assigned to one of three active conditions,
namely, PE (n = 23), SIT (n = 19), and PE-SIT (n = 22), against a waitlist condition (WL; n = 15).

Participants were assessed using multiple structured interviews (Structured Clinical interview for DSM; Post-traumatic symptom scale interview) and self-report measures (BDI-II; STAI) to screen for comorbid conditions. Participants were assessed by independent clinicians at pre-treatment, post-treatment, 3-month, 6-month, and 12-month follow-up. The study found that PE had greater symptom reduction on all symptom measures.

The study, again, found that participants in the SIT condition had greater immediate symptom reduction for severity of PTSD than participants in PE. However, the superiority of SIT over PE was not maintained at follow-up and PE proved to be superior to SIT and all other conditions (Foa et al., 1991). PE had performed better compared to SIT and SIT-PE on several indices with large effects sizes on the PSSI, the BDI-II, and STAI-S, lower anxiety, and, at 12-month follow-up, participants had improved social adjustment. Clinically, the end-state functioning of participants was better on PE (52%) compared to SIT (42%) and SIT-PE (36%) at 12-month follow-up of participants.

The findings of Foa et al. (1991) and Foa, Dancu et al. (1999) identified PE as a promising treatment for PTSD. During the next two decades, several clinical trials would evaluate the efficacy and effectiveness of PE for PTSD in various contexts and focus areas. The initial studies of PE (Foe et al. 1991; Foa, Dancu et al. 1999) initiated the incremental efficacy of PE and resulted in a proliferation in clinical trials studies on PE for PTSD in the following two decades.

### 3.8.2 PE as a first-line treatment for PTSD

PE for PTSD has produced a substantial number of replication studies demonstrating PE’s effectiveness in treating PTSD, making it a leading treatment for PTSD in the USA (cf.
Rothbaum et al., 2000). A search of the Clinical Trials registry (clinicaltrials.gov), using the key words: “PTSD”; “prolonged exposure”, showed more than 100 clinical trials in various stages such as recruiting, not yet recruiting, active, not recruiting, and completed studies for PE across the world (see Figure 3.1). The use of robust methodological studies for the investigation of PE for PTSD led to a proliferation in clinical trial studies.

Meta-analytic studies and critical comparative reviews have synthesised the results of RCTs to further consolidate the literature on the efficacy and effectiveness of PE for PTSD (e.g., Bradley, Greene, Russ, Dutra, & Westen, 2005; Cusack et al., 2016; Kline, Cooper, Rytwinski, & Feeny, 2018; Powers et al., 2010). For example, in a meta-analysis conducted by Powers et al. (2010), the study reported that more than 80% of participants in PE had better outcomes compared to the controlled conditions. To this end, the current clinical practice guidelines of the American Psychological Association (APA) and International Society of Traumatic Stress Studies (ISTSS) recommend the use of PE as a treatment of choice for PTSD in adults (Courtois et al., 2017).

Based on the guidance of the ISTSS, the first international guidelines for the treatment of PTSD were published (Foa, Keane, & Friedman, 2000), with a second edition ten years later (Foa, Friedman, Cohen, & Keane, 2009). PE was also chosen as the treatment of choice in all VA healthcare centres across the USA, and required nationwide training of health professionals in PE (Eftekhari et al., 2013; Karlin et al., 2010). A review of the clinical trials over the last three decades shows that PE has been extensively tested to treat PTSD in various populations, contexts, and with various comorbid conditions and treatment augmentations (See Figure 3.1). Figure 3.1 illustrates clearly that there is a dearth of the dissemination and implementation of PE for PTSD in the global South, among others. A discussion of the various components relating PE for PTSD is presented below.
3.8.3 Is PE safe?

In addition to the positive outcomes of PE for PTSD (Foa et al., 1991; Foa, Dancu et al., 1999), scholars also expressed concerns over the potential adverse effects of imaginal exposure on trauma survivors (e.g., Kilpatrick 1984; Markowitz et al., 2015; Pitman, 1996).

In response to persistent negative appraisals of imaginal exposure, Foa, Zoellner, Feeny, Hembree, and Alvarez-Conrad (2002) investigated whether the use of imaginal exposure in PE would exacerbate symptoms of traumatic stress, if there would be an increase in depression, and if there is any causal relation between symptom exacerbation and client drop-out in PE. Evaluating symptom exacerbation in female (n = 74) survivors of sexual and non-sexual assault were randomly assigned to either PE with imaginal and in vivo exposure or to PE with imaginal and in vivo with cognitive restructuring.
Participants attended bi-weekly sessions and completed pre-treatment, during treatment, and post-treatment assessments using multiple validated instruments such as the posttraumatic symptom scale interview (PSS-I) (Foa, Riggs, Dancu, & Rothbaum, 1993), the Beck Depression Inventory (BDI-II) (Beck et al., 1961), and Beck Anxiety Inventory (BAI) (Beck, Epstein, Brown, & Steer, 1988).

At the end of nine to 12 sessions, the trial showed that most participants in the PE condition (84.6% n = 33) and PE/CR condition (97.1% n = 33) did not experience symptom worsening after imaginal exposure. Although a small sample reported a relatively small percentage of symptom increase after the first session of imaginal exposure, this was not significant (p = .07). Furthermore, the participants who experienced an increase in symptoms still benefitted from treatment, and it was found that a transient symptom exacerbation has no causal link to treatment drop-out (Foa et al. 2002).

Theoretically, Foa and Kozak (1986) report that adequate activation is necessary to allow for emotional processing. Therefore, transient symptom increases are expected, but symptom reduction should continue as treatment progresses. More than a decade since Foa et al. (2002) investigated the acclaimed risk of PE, Larsen, Wiltsey-Stirman, Smith, and Resick (2016) found that trauma-focused treatments such as PE and CPT are safe to use, and persons who experience transient symptom increase still attain clinically significant benefits from treatment. Larsen et al. (2016) found that symptom increase due to imaginal exposure had small effect sizes (d = .05 – d = .21) and could not predict non-completion of treatment. The consistent findings of these studies over the last two decades should dispel the myth about PE as a harmful treatment for trauma survivors.
3.8.4 PE and treatment augmentation

Given the growing evidence base of PE, scholars started to focus on dismantling PE and evaluating the efficacy of different components of PE. The use of cognitive restructuring (CR) to augment treatment effect with PE was studied by Foa and Rauch (2004), based on a sample of female (n = 86) survivors of sexual violence and non-sexual violence. Participants were randomly assigned to three conditions (PE = 40; PE/CR = 46; WL = 9) to ascertain if PE/CR would result in augmented outcomes compared to PE (Foa & Rauch, 2004). Participants were assessed using the PSS-I, BDI-II, and the post-traumatic cognitions inventory (PTCI) (Foa, Ehlers et al. 1999) at pre- and post-treatment (3, 6, and 12-month follow-up).

Negative cognitions about the self and the world have been found to be a maintaining factor in PTSD (Foa, Ehlers et al., 1999; Foa & Rothbaum, 1998). The authors’ hypothesis that CR would result in greater changes in negative cognitions compared to standard PE was not supported, with no significant difference between the treatment conditions being found (Foa & Rauch, 2004).

The authors highlighted that CR can be a useful additive but does not augment treatment outcomes compared to PE alone. The targeting of negative cognitions alone does not predict good treatment outcomes for PTSD. Similar findings were reported by Moser, Cahill, and Foa (2010) in a study on treatment matching of persons with severe negative cognitions and PTSD to different treatments. The study randomly assigned female survivors (n = 54) of sexual assault to two active conditions (PE or PE/CR). The study found that the addition of CR to PE, even in a sample of persons with severe negative cognitions at pre-treatment, had poorer outcomes compared to persons in the PE only condition (Moser et al., 2010).
The targeting of negative thoughts is part of the general emotional processing in PE, does not require a stand-alone intervention – the above-mentioned studies rather found a correlation and not a causal effect (Foa & Rauch, 2004).

3.8.5 PE in real-world settings

The use of PE with added components such as CR would also be assessed in novel environments such as community clinics (Foa et al., 2005). This allowed for assessment, not only of combined treatments, but of the feasibility and acceptability of PE in different contexts outside of the academic laboratory (Foa et al., 2005). Foa and colleagues (2005) made several hypotheses related to the effectiveness of PE for PTSD. Two central hypotheses were that PE combined with cognitive restructuring would have an improved treatment effect compared to PE alone, and that established clinicians at an academic centre would have greater treatment outcomes to clinicians at a community clinic without any or limited prior CBT training.

Using a sample of female (n = 197) survivors of sexual violence and non-sexual violence from various community and federal organisations, participants received at least eight sessions in the active conditions. Participants were randomly assigned to a PE alone condition (n = 52), PE/CR condition (n = 44), and a WL group (n = 25). Using multiple assessment instruments to measure primary and secondary outcomes, the study found that PE/CR did not increase treatment effect compared to PE alone, which is analogous to the Foa and Rauch (2004) and Moser et al. (2010) studies.

More importantly, the second hypothesis was also not supported that clinicians at a community clinic would have inferior outcomes compared to clinicians at an academic clinic. The study of PE in non-specialist contexts such as community clinics contributed to the acceptability and feasibility as treatment to disseminate beyond specialist contexts.
3.8.6 PE and public health services

The implementation of PE in VA clinics across the USA has produced several public health benefits. A pilot study by Rauch et al. (2009) found that routine use of PE in VA centres provided preliminary data on the effective treatment of PTSD with depressive symptoms. These findings were supported by a nationwide study on the routine clinical use of PE across VA clinics in the USA for the treatment of PTSD and depression by Eftekhari et al. (2013). The study found that PE reduced symptoms of PTSD and depression in veterans ($n = 1931$) with good effect size at pre- and post-assessment for PTSD ($d = .087$) and depression ($d = .066$). The implementation was not only found to be effective in routine clinical use by clinicians in VA centres, but also had larger scale benefits of a reduction in hospitalisation services (Tuerk et al., 2013).

In a study conducted by Tuerk et al. (2013), the authors observed health service utility 12 months prior to the commencement of treatment and 12 months after treatment completion in a sample of veterans ($n = 60$). Significant reduction in PTSD symptoms were found and a large reduction in health services after the completion of treatment. The use of PE did not only have clinical benefits for the patient but also for general public mental health services (Tuerk et al., 2013). In addition, the accessibility of PE in primary care has also received increased attention. One of the first RCTs on the effectiveness of PE-PC in a primary care setting significantly reduced symptoms of PTSD and general distress in a sample ($n = 67$) of active duty military veterans compared to a delayed treatment minimal contact condition. Treatment gains were maintained at 6-month follow-up (Cigrang et al., 2017; Rauch, Cigrang, Austern, & Evans, 2017).
3.8.7 PE and clinical comorbidity

The initial studies of PE for PTSD focused mainly on the treatment of female survivors of sexual violence and non-sexual violence, but this trend shifted when outcome studies were conducted of PE in diverse populations and contexts were initiated during the last decade. Researchers started to investigate various trauma types and different populations (i.e., Van Minnen, Harned, Zoellner, & Mills, 2012). For example, the treatment of female military veterans with PTSD (Schnurr et al., 2007), the treatment of PTSD in older persons, and persons with mild traumatic brain injury (mTBI) (Sripada et al., 2013; Thorp, Stein, Jeste, Patterson, & Wetherell, 2012), are but a few studies that included different populations to assess the effectiveness of PE for PTSD.

The initial literature on PE as an effective treatment for PTSD with comorbid conditions such as personality disorders (PDs), substance use disorders (SUDs) and severe psychopathology such as schizophrenia were sparse. The use of exclusion criterion in clinical trials were viewed as limiting the possibility of broad clinical application of PE (Ronconi, Shriner, & Watts, 2014). For example, persons with substance use disorders and schizophrenia were mainly excluded from the initial trials for the treatment of PTSD.

Consequently, questions pertaining to the efficacy of PE in treating PTSD with comorbid conditions were warranted. In recent years, evidence has been found for using PE for PTSD in populations with substance use such as alcohol (Foa, Yusko et al., 2013; Ruglass et al., 2017) and persons with a history of psychosis can benefit from PE for PTSD (De Bont et al., 2016; De Bont, Van Minnen, & De Jongh, 2013; Van Den Berg et al., 2015).

For example, Foa, Yusko et al. (2013) found that the use of PE did not exacerbate alcohol use in a sample of persons with alcohol dependence and PTSD. Contrary to the usual exclusion of persons with alcohol use in prior clinical trials, now PE could not be seen as iatrogenic in the treatment of PTSD with comorbid alcohol use disorder. In addition, persons
with a history of schizophrenia were also considered inappropriate for PE. Yet, van den Berg et al. (2015) found that both PE and eye movement desensitising and reprocessing (EMDR) (Shapiro, 1995) produced positive results in the treatment of PTSD in persons with a history of schizophrenia. The study also reported that the use of exposure treatments such as the above-mentioned are safe to use with persons diagnosed with schizophrenia.

In addition to investigating the effects of alcohol use and psychosis in the treatment of PTSD, Hembree, Cahill, and Foa (2004) investigated the impact of PDs in the treatment of PTSD using PE. Hembree et al. (2004) explored the notion that a comorbid personality disorder would negatively affect the treatment of PTSD. An earlier review reported that the presence of a comorbid personality disorder has no significant effect on the outcome of treating anxiety and trauma-related disorders (Dreesen & Arntz, 1998). To this end, Hembree et al. (2004) recruited a sample of female (n = 75) survivors of sexual violence and non-sexual violence. Participants were randomly assigned to either a PE condition (n = 41) or PE/CR (n = 34), and no WL group was included in the trial.

Hembree et al. (2004) reported that 29 participants out of the entire sample (n = 79) had a personality disorder (Avoidant PD; Obsessive Compulsive PD, Borderline PD, Schizoid PD, Antisocial PD, and Narcissistic PD). At the end of treatment, both PTSD with a personality disorder and PTSD without a PD had significant loss of symptoms, indicating that there was no significant difference in treatment outcome for PTSD with or without a comorbid PD. However, end-state-functioning at posttreatment assessment was based on a combination of < 15 on the PSS-I scale, and BDI-II and BAI scores < 10. Participants with a PD (41%) had lower end-state functioning compared to participants without a PD (76%). Overall, the study highlighted the complexity of PDs, but that persons with a primary diagnosis of PTSD could still benefit from PE.
3.8.8 PE compared to other trauma-focused treatments

PE had accumulated evidence to show its superiority compared to treatments such as SC, but still needed to be compared to other exposure therapies. Alongside PE, other behavioural and cognitive treatments were also developed to treat PTSD.

According to Ironson, Freund, Strauss, and Williams (2002), during the mid- and late-1990s, comparison of prolonged exposure with EMDR (Shapiro, 1995) produced mixed results on the efficacy between the two treatments. Based on the earlier outcomes studies (e.g., Lee, Gavriel, Drummond, Richards, & Greenwald, 2002; Rogers, Silver, Goss, Obenchain, Willis, & Whitney, 1999; Devilly & Spence, 1999) in the 1990s, the authors hypothesised that both PE and EMDR would effectively reduce symptoms of PTSD, but that EMDR would out-perform PE on tolerability and drop-out.

3.8.8.1 PE compared to Eye movement desensitization and reprocessing

EMDR requires a participant to imagine the worst or most distressing part of a traumatic event. Whilst engaging in this recollection, the therapist is seated in front of the participant. The participant is then required to follow the side-to-side finger movements of the therapist whilst imagining the trauma event. During this period, the participant is asked to rate his or her SUD from 0 – 10. Once the SUD score is at 0 or 1, and whilst tracking the therapist’s finger movements, the participant is asked to imagine an alternative positive experience until it is accepted as believable (Shapiro, 1995). The alternative positive cognition is measured by the Validity of Cognition scale (VoC), which ranges from 1 (not at all) to 7 (absolutely true) (Shapiro, 1995). A fundamental difference between EMDR and PE is that EMDR avoids an increased activation of the trauma memory, whereas EPT states that adequate activation allows the trauma memory to be modified with new and competing information (Foa & Kozak, 1986).
In a pilot study by Ironson et al. (2002) using a sample of 22, participants were assigned to each of the active conditions (PE and EMDR). Randomisation of participants was not complete as two participants were directed towards the PE condition due to dropout. Participants had three preparatory sessions, which included baseline assessments, relaxation training, and in vivo homework. According to the authors, they included in vivo homework for the EMDR condition to match treatments. Yet, in vivo homework is not an essential component of EMDR.

At the end of session six, participants in both conditions for PE ($t = -5.27$, $p = .002$) and EMDR ($t = -3.36$, $p = .008$) did not meet the criteria for PTSD. The study also found that after six sessions for both conditions, PE had the highest dropout rate compared to EMDR. These results supported the hypotheses of both PE and EMDR effectively reducing symptoms of PTSD and EMDR as a more tolerable treatment. The study did, however, have notable limitations with the small sample size, limited number of sessions (6 compared to 9–12 sessions for PE), and the inclusion of in vivo homework in EMDR which was not standard practice.

In another comparison study of PE with EMDR, Rothbaum, Astin, and Marsteller (2005) attempted to address the methodological limitations of Ironson et al. (2002) and previous comparison studies (e.g., Devilly & Spence, 1999; Ironson et al., 2002; Lee et al., 2002; Rogers et al., 1999; Simon, 2000; Taylor et al., 2003).

According to Rothbaum et al. (2005), two of the previous comparison studies adhered to most of the gold standards of intervention research for PTSD, but the results were mixed (Foa & Meadows, 1997). For example, Taylor et al. (2003) compared EMDR with PE and found that PE was superior to EMDR and relaxation training. Whilst Lee et al. (2002) compared EMDR with PE and SIT combined and found that EMDR was the superior
treatment. The decision to combine PE and SIT in the Lee et al. (2002) study is not clear as Foa, Dancu et al. (1999) found that PE-SIT is not superior to PE alone.

In the study by Rothbaum et al. (2005), using a larger sample of 74 (n = 74) rape survivors, participants were randomly assigned to two active conditions (PE and EMDR) and one WL group. At the end of a 9-session active treatment phase of either PE or EMDR, 5% in PE condition, 25% in EMDR, and 90% in the WL group still met the criteria for PTSD (p < .001). Differences in diagnostic reduction between PE and EMDR was not significant (p = .108). At post-treatment, the difference in end-state-functioning between PE (70%) and EMDR (50%) was not significant, but at 6-month follow-up end-state-functioning for PE (78%) was significantly greater than EMDR (35.3%) (p = .017).

Results on the tolerability of treatment was not significant between the active conditions, yet PE (13%) had a lower dropout rate compared to EMDR (20%), which is contrary to Ironson et al. (2002). Rothbaum et al. (2005) reported that overall findings of the study go against earlier studies comparing EMDR and PE. Both treatments were effective in reducing symptoms of PTSD at end of treatment and follow-up, yet PE showed greater potential for a longer lasting treatment effect.

### 3.8.8.2 PE compared to cognitive processing therapy

In addition to EMDR (Shapiro, 1995), which is considered to be an exposure therapy (Rothbaum et al., 2005), another notable treatment for PTSD is CPT (Resick & Schnicke, 1992). CPT is a combination of cognitive therapy and a written form of exposure (Resick, Nishith, Weaver, Astin, & Feuer, 2002). CPT focuses on pre- and post-beliefs of the person and targets distorted cognitions, which might maintain PTSD. Clients are exposed to the trauma memory through writing about the trauma and reading it to themselves and the
therapist. During the processing, stuck points are identified, and emotional processing occurs (Resick & Schnicke, 1992).

According to Resick et al. (2002), CPT had accrued favourable results during the 1990s, but did not have adequate methodological rigour, therefore, comparing it to PE was appropriate. Using a sample of 121 trauma survivors, participants were randomly assigned to either CPT (n = 41), PE (n = 40), or a Minimal Attention Condition (MA) (n = 40). Unlike Ironson et al. (2002), treatment protocols were not violated by any additions or changes in order to match treatments, but the number of sessions were adjusted to match the length of treatment. Participants were assessed at pre-treatment, post-treatment, and three- and nine-month follow-up.

More than half of participants in both the PE (53%) condition and CPT (53%) condition had a negative PTSD diagnosis at post-treatment. Overall, there were differences in diagnosis at any of the time points for both PE and CPT. Both treatments produced favourable end-state-functioning in both the intention to treat sample and completer sample. Essentially, CPT and PE had both been found to be effective treatments for PTSD with CPT, having a greater impact on cognitions of guilt and self-blame compared to PE (Resick et al., 2002).

3.9 Dissemination of PE

In a review article by Schnyder et al. (2015), Edna B. Foa reported that a crucial aspect for the future of PE and the effective treatment of PTSD is to find “…ways to disseminate and implement our evidence-based treatments into community clinics around the world” (p. 5). Becker et al. (2004) report that exposure therapies might be too overwhelming for an anxious client or it could lead to dropout or symptom worsening (Gutner, Gallagher, Baker, Sloan, & Resick, 2016; Zayfert et al., 2005). A recent systematic review and meta-
analysis found that dropout rates in recommended treatments for PTSD remain high (16% [95% CI, 14% - 18%]) with high levels of heterogeneity across 115 studies with a total sample of 7724 participants from 2008 to 2018 (Lewis, Roberts, Gibson, & Bisson, 2020).

Hundt et al. (2018) explored the reasons why military veterans refused to engage in PE or CPT at a VA healthcare centre. In a sample of 24 male and female veterans who were assessed and diagnosed without any treatment, the study found that systemic processes such as inefficiencies and delays, a negative healthcare environment and a negative experience of healthcare staff were the primary barrier to low-engagement with an effective treatment for PTSD (Hundt et al., 2018).

In a second study by Hundt and colleagues (2018), the authors explored the reasons for dropout at VA health facilities. In a sample of 27 veterans, the most significant reasons for dropout was therapy-related issues. Participants stated that they did not have a good understanding of the rationale of PE or CPT, there existed poor therapeutic alliance, and that treatment was “too stressful” (Hundt et al., 2018, p. 9). These findings highlight the need for improved service delivery environments and continuous development of persons delivering evidence-based treatments in primary care facilities (e.g., Hembree, Rauch, & Foa, 2003).

3.10 Implementation of PE for PTSD in LMICs

Figure 3.1 illustrates that a major focus of research has been conducted in Anglo-Saxon and Western-European countries, and minimal studies conducted in the global South, for example, African and South American countries. A meta-analysis by Mørkved et al. (2014) reported that only two out of 32 studies on PE for PTSD included a majority non-Western sample. As a result, attempts have been made to evaluate and implement PE beyond the borders of the USA. One of the first intervention studies on PE for PTSD in East Asia found that PE effectively reduced symptoms of PTSD in a small sample of adult males and
females with mixed traumatic events in Japan (Asukai, Saito, Tsuruta, Kishimoto, & Nishikawa, 2010; Asukai, Saito, Tsuruta, Ogami, & Kishimoto, 2008).

In addition, studies conducted in Israel (e.g., Aderka, Foa, Applebaum, Shafran, & Gilboa-Schechtman, 2011; Aderka, Gillihan, McLean, & Foa, 2013; Gilboa-Schechtman et al., 2010; Nacash et al., 2011; Nacash et al., 2015), in the Netherlands (De Bont, Van Minnen, & De Jongh, 2013; Van Den Berg et al., 2015) and Poland (Popiel, Zawadzki, Pragłowska, & Teichman, 2015), have added to the efficacy and effectiveness of PE beyond the boarders of the USA, but little to no research has been or is conducted in LMICs in the global South on the dissemination and implementation of PE for PTSD. Fortunately, the need to address a global dissemination and continuous evaluation of PE in novel contexts and populations is encouraged (see McLean & Foa, 2013; Schnyder et al., 2015). Foa, Gillihan et al. (2013) emphasised the need to disseminate PE in developing countries with higher levels of traumatic stress symptoms, for example, Pakistan, India, and Uganda.

Yet the implementation of PE in LMICs also faces several challenges (World Health Organization [WHO], 2014). As described in Chapter 1, challenges in LMICs range from limited mental health services and infrastructure to the obstacles encountered when disseminating and implementing treatments such as PE in contexts of ongoing adversity characterised by poverty, gender-based violence, and increased levels of trauma exposure in low-resource settings (WHO, 2014). As a result, research on the feasibility and acceptability of TFTs such as PE for PTSD in LMICs is sparse (Booysen & Kagee, 2020a, 2020b; Kaysen et al., 2020).

The above-described literature review of PE for PTSD has highlighted the depth of evidence which informs the efficacy and effectiveness of PE for PTSD. Yet the review has also highlighted the lack of research and knowledge pertaining to the dissemination and implementation of PE in South Africa and similar LMICs in the global South. In the case of
South Africa, and similar LMICs, the implementation of ESTs requires extensive research to ascertain not only the effectiveness of PE, but also the feasibility and acceptability of PE in LMICs such as South Africa that are characterised by ongoing adversity of limited resources and increased levels of trauma exposure.

To address the existing lack of knowledge and utility of ESTs such as PE for PTSD in South Africa, specifically among adults, the present study used a mixed method approach. The approach consisted of both quantitative and qualitative data, to explore not only the effectiveness, but also the feasibility and acceptability of PE in a South African sample of trauma clients and counsellors. The findings of the present study will highlight aspects of effectiveness of PE to reduce symptoms of PTSD at a primary care level, how trauma counsellors experience providing trauma focused services in low-resource settings and what their attitudes are towards the use of ESTs such as PE in communities experiencing ongoing adversity. Lastly, this study also highlights how trauma survivors experienced PE as a TFT for PTSD. Overall, the study will contribute to the literature on the dissemination and implementation of PE for PTSD in South Africa.

3.11 Chapter summary

The treatment of PTSD has developed over the last several decades. PE has accrued substantial empirical evidence to recommend it as an effective treatment for PTSD. Yet, the dissemination and implementation of PE in LMICs in the global South regions such as South Africa are sparse. Given the prevalence of limited access to evidence-based mental healthcare services in LMICs, the dissemination and implementation of TFTs such as PE for PTSD in South Africa are necessary to enhance the literature on dissemination and implementation of ESTs for PTSD in LMICs.
Chapter 4

Methodology and Research Design

4.1 Introduction

This chapter describes the methodology and research design used to investigate the research hypothesis (phase 2) and explore the two research questions (phase 1 and phase 3) of the present pilot and feasibility study. First, the chapter provides an overview of the chosen methodology and the epistemological stance of the study. The chosen research sites are described and the ethical considerations pertaining to the study are discussed. The chapter concludes with an outline of the ensuing results chapters.

4.2 Mixed method research

The epistemological stance of the study adopts a “situationalist perspective” towards investigating and exploring the broad research aim of the study (Hathaway, 1995, p. 539). A situationalist perspective states that the nature of the research question informs the chosen research method, which can be either qualitative or quantitative, or a combination of the two methods (Hathaway, 1995). Eldridge et al. (2016) states that feasibility studies investigates whether something can be done and how to proceed, and that pilot studies, which has some overlap with feasibility, makes use of a specific design to accrue preliminary data on a topic. As a pilot and feasibility study, this research sought to accrue preliminary data to ascertain whether PE for PTSD is effective, feasible and acceptable in a South African context. The study investigates fundamental questions such as how and whether PE can be applied in a South African context, whether it is accepted by trauma survivors, and how it is perceived by trauma counsellors working in low-resource settings.
Therefore, a mixed method approach was used to investigate and explore the broad aim of the study. A mixed method design is adopted for the purpose of an integration of the data to develop a coherent understanding of the research questions and hypothesis (Schoonenboom & Johnson, 2017). In the current study, the term “mixed method” is adopted as it was considered important to communicate and conduct an integration of the data to provide an overall and coherent understanding of the study. The adopted quantitative (SCED) and qualitative (TA) methods in the present study are complimentary as they both emphasise an idiographic focus, and TA provides additional depth and understanding to the intervention data, and the overall aim of the research (Richards, Taylor, Ramasamy, & Richards, 1999). The use of a mixed method is not only complimentary but also controls for the limitations found in both qualitative and quantitative methodologies (Plano Clark & Ivankova, 2016).

Table 4.1 illustrates the process of the research design.

Table 4.1

<table>
<thead>
<tr>
<th>Phase</th>
<th>Aim</th>
<th>Methodology</th>
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<tr>
<td>1. Qualitative - Trauma counsellors</td>
<td>How do trauma counsellors experience treating persons who present with symptoms of PTSD living in a resource-constrained context, and what are the attitudes and knowledge of trauma counsellors toward the use of ESTs such as PE for PTSD in South Africa?</td>
<td>In-depth semi-structured individual interviews based on thematic analysis</td>
</tr>
<tr>
<td>2. Quantitative - PE intervention</td>
<td>To ascertain that trauma survivors who receive six sessions of brief PE will have reduced symptoms of PTSD, depression, and anxiety at the end of treatment and maintain symptom reduction at a three-month follow-up.</td>
<td>Single case experimental design. This phase also included a baseline, six session intervention, post-intervention, and three-month follow-up.</td>
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3. Qualitative – Trauma survivor interviews

How do trauma clients who present with symptoms of traumatic stress experience a brief prolonged exposure treatment for PTSD?

In-depth semi-structured individual interviews based on thematic analysis.

4.3 Research sites

The research was conducted at five organisations (four non-governmental organisations (NGOs) and one university-based academic counselling centre) (see Figure 4.1) that provide trauma-focused counselling services, among others, to trauma survivors. Three of the NGOs are in the Cape Metropole District, known as the City of Cape Town, in the WC of South Africa. The academic counselling centre is in the city of Grahamstown, which is in the Sarah Baartman District Municipality in the Eastern Cape (EC) of South Africa, and the fourth NGO is in Port Elizabeth which is in the Nelson Mandela Metropolitan Municipality in the EC, South Africa. Both the WC and the EC have been found to have the slowest reduction (and still the highest) of household crimes (WC: 13.4% - 9%; EC: 12.3% - 9%) and individual experiences of crime (WC: 7.6% - 5.4%; EC: 4.8% - 5.1%) over the last five years (Statistics South Africa, 2017).

Figure 4.1. Geographical locations of research sites.
The five organisations are the Trauma Centre for Survivors of Violence and Torture in Cape Town, the Rape Crisis Centre in North end, Port Elizabeth, and two Rape Crisis Centres in Athlone and Observatory, Cape Town. The academic counselling centre is the Rhodes University Counselling Centre in Grahamstown in the EC. Detailed discussion is provided in the ensuing chapters of each phase of the study. The following sections provide a brief description of each research site:

4.3.1 The Trauma Centre

The Trauma Centre provides trauma-focused therapy to survivors of a variety of trauma such as sexual violence, intimate partner violence, motor vehicle hijackings, and gang-related traumas, xenophobic attacks, among others. The Trauma Centre is a non-governmental human rights organisation that contributes towards violence prevention through advocacy, capacity building, research, and the provision of mental health services for survivors. Victim rehabilitation for survivors of social crime, political violence and torture are core elements of the work undertaken by the organisation. At the time of study, the trauma-focused therapy was administered by counsellors at the Trauma Centre to persons who present with symptoms of traumatic stress.
4.3.2 Rape Crisis Centres

Three Rape Crisis Centres (RCCs) were part of this study. One was in North End, Port Elizabeth, and the other two were in Athlone and Observatory, Cape Town. The Rape Crisis Centre organisation was initially established in 1976. Underpinned by a feminist discourse, the RCCs provide several forms of services to rape survivors, both female and male. Among these services are counselling, advocacy work, court support for rape survivors, and training and development of community members. The RCCs are particularly focused on empowerment of survivors through providing intervention, but also training of volunteers (sometimes former trauma survivors) to work as volunteer counsellors.
Figure 4.3. Rape Crisis Centre in Port Elizabeth.

Figure 4.4. Rape Crisis Centre in Athlone, Cape Town.
Figure 4.5. Rape Crisis Centre in Observatory, Cape Town.

4.3.3 Rhodes University Counselling Centre

The Rhodes University Counselling Centre (hereafter known as Counselling Centre) is situated at Rhodes University in Grahamstown, EC. The Counselling Centre provides psychological services to all registered students at Rhodes. The services are free of charge, short-term and focused on addressing present or current difficulties which might be experienced by a student. Staff at the counselling centre consist of registered counselling psychologists and intern trainee counselling psychologists.
These research sites were chosen based on the trauma-focused services they deliver at a primary care level to members of the respective communities. The Trauma Centre in the WC and the Counselling Centre in the EC provided me with referrals of trauma survivors who participated in the intervention. The same participants provided by the Trauma Centre and Counselling Centre were also invited to participate in post-intervention interview based on their experience of the trauma therapy. The RCCs in Port Elizabeth and Cape Town and the Trauma Centre in Cape Town provided trauma counsellors who participated in the interviews for the second phase of the study.

The PI met with the relevant stakeholders of the various organisations (e.g., counselling centre manager) to present and discuss the focus and requirements of the study. This was done to prevent any misunderstandings or misconceptions related to the purpose and requirements of the study. The Trauma Centre and Rape Crisis Centres allowed the PI to invite trauma counsellors to participate in individual interviews about their experiences as counsellors and their knowledge pertaining to evidence-based trauma-focused treatments.
such as PE. The Trauma Centre and the Counselling Centre agreed to refer appropriate participants to be screened for the intervention phase of the study.

4.4 Ethical considerations

The research was conducted at multiple research sites across the WC and the EC, which required ethical approval from two universities. First, ethical approval for the research was obtained from Stellenbosch University Human Research Ethics Committee (SU-HREC: 7 September 2017 - Project number: REC-2017-0188) as I am registered as a doctoral candidate at SU. Additional approval was obtained from the Rhodes University Ethical Standards Committee (RUESC: 5 March 2018 - Reference number: 9633672) as part of my sample consisted of students from Rhodes University (see Appendix A and B).

In addition to the ethical approval, gatekeeper permission was obtained from various organisations before data collection commenced (see Appendices C to H). Due to the nature of the research project, the psychological safety of participants (counsellors and clients) was prioritised throughout the research. Excluded participants were still eligible for services at the respective organisations. For example, clients referred by the Trauma Centre or Counselling Centre who did not meet the inclusion criteria were re-referred to the services of the Trauma Centre or Counselling Centre. The same procedure was implemented for excluded participants at the Counselling Centre.

Throughout the research process, principles such as written informed consent (see Appendix I – J), confidentiality, anonymity, discontinuance, beneficence and non-maleficence, and working with a vulnerable population were always maintained throughout the study (Bless et al., 2014). All clients and counsellors were verbally informed about the nature of the research. Participants (clients and counsellors) were provided with information sheets about the project for their personal reference (See Appendix K – L). Participants were
also informed that they could request a copy of the trauma therapy session video recordings and audio recordings of the individual interviews. This was done to communicate transparency and access to their personal information as participants in the project. Only one trauma counsellor requested a copy of the individual interview session, and it was provided.

4.4.1 Adverse events and mitigation

As the PI of the study, I was aware of the possible risk to clients and counsellors. Psychological treatments used in research should not be trivialised as clients could experience harm during the study, for example, harm to dignity or emotional well-being (Wassenaar & Slack, 2016). Safeguarding and mitigation of potential harm was monitored throughout the research process. For example, clients were monitored throughout the intervention phase by verbally asking how a client was experiencing the trauma therapy, and by monitoring participant scores on the PCL-5. In addition, all participants had the right to decline and/or exit the study at any time. Secondly, clients who decided to decline from participation in the study were not treated unfairly and were invited to make use of the services at the Trauma Centre and or Counselling Centre when needed.

Lastly, during the window period between the post-intervention and the three-month follow-up, clients were informed to contact the PI or any other suitable services in the event of an emergency or need to re-enter services. This was done to circumvent any confusion that clients were not allowed to re-enter services during the three-month period. No emergency or re-entering treatment during the three months was reported. No adverse events occurred or were reported to the PI or any other relevant person during the project. Only one participant reported increased feelings of distress at the three-month follow-up assessment. She was advised and referred to enter services at the Rhodes University Counselling Centre or The
Rhodes University Psychology Clinic. I also informed her via email that she could contact me if she needed any other assistance (e.g., a referral letter).

Validity, reliability, and trustworthiness of the study will be discussed in relation to each phase of the study in the ensuing chapters.

4.5 Chapter summary

This chapter briefly discussed the overall methodology and research design used in the study. A mixed method approach was chosen based on the nature of the research aim of the study. Chapters 5, 6, and 9 will provide an overview of each methodology used to investigate and explore each of the two research questions and one research hypothesis. Chapter 6 will provide a discussion of SCED as the chosen method for the intervention phase of the study. Chapter 5 and 9 provides a discussion of TA as the qualitative method for both question 1 and 2, and the results of question chapter 5 and 9. Chapters 7 and 8 provides the results and discussion of chapter 6.
Chapter 5

Phase 1: Experiences of Trauma Counsellors

5.1 Introduction

The chapter presents the qualitative results of the trauma counsellor interviews. First, a description of the qualitative method is provided which is followed by a description of the study procedure for this phase of the study. Then, I report on the results with a specific focus on the superordinate themes and themes identified in the data set. The chapter concludes with a discussion of the results in relation to the extant literature on the experiences of trauma counsellors working in LMICs.

5.2 Thematic analysis

Biggerstaff (2012) claims that qualitative research is rooted in psychology due to the early case study and idiographic research of Sigmund Freud (1856–1939) and Jean Piaget (1896–1980). The field of qualitative research in psychology is also described as complex and requires clarity in terms of why and how qualitative methods are implemented in research (Braun & Clarke, 2006). According to Neuman (2006), in a context of historical and contextual awareness, qualitative research aims to represent and interpret social phenomenon and individual experience, as they exist in social life. In addition, Pietkiewicz and Smith (2014) state that in addition to ascertaining causal effects among variables, the quality of human experiences is equally important. Therefore, thematic analysis (TA) (Braun & Clarke, 2006) was used in the present study (phase 1 and phase 3) to explore and describe the experiences of participants in the current study.
5.3 Aim of TA

The aim of TA is to identify and analyse patterns in qualitative data (Braun & Clarke, 2006; Clarke & Braun, 2013). Thematic analysis only recently came to prominence in the last decade (Clarke & Braun, 2013). Clark and Braun (2013) state that TA is essentially atheoretical and should not be seen as a methodology, which is premised on fixed philosophical tenets such as interpretive phenomenology. As a result, and considering the aim to identify analyse patterns in qualitative data, TA is considered to be a more accessible and flexible analytic method to conduct qualitative research (Braun & Clarke, 2006; Clarke & Braun, 2013). Based on the focus of witnessing and experiencing trauma, the use of TA was deemed appropriate to explore the comprehensive experiences and description of both the counsellors (Chapter 5) and clients (Chapter 9).

TA as a qualitative method has a developed analytical guideline on how matters such as sample sizes, types of research questions, and analytical processes in TA are conducted. It must be emphasised that Braun and Clarke (2006) emphasise the flexibility of TA and encourage researchers to be explicit about how TA is used concomitantly with different methodologies such as phenomenology (Clarke & Braun, 2013).

5.7 Phase 1: Procedure

5.7.1 Participants – trauma counsellors

In South Africa, the title of trauma counsellor is largely associated with mental health practitioners such as psychologists, social workers, registered counsellors, and even lay-counsellors (e.g., Higson-Smith, 2013). Trauma counsellors usually work at a primary healthcare level to provide mental health services in resource-constrained communities on an individual, group, or community-based level (Lund et al., 2010). The training and competency of trauma counsellors in South Africa are disparate due to different kinds of
healthcare professionals adopting the label of trauma counsellor. Yet trauma counsellors provide an invaluable service to the public mental health sector as they work on the frontlines of traumatic stress.

I contacted the Trauma Centre and RCCs at various stages of the research process to meet with and inform staff at the respective sites about the research. For example, I contacted the centre managers via email or telephone to set up a meeting to present my research. After obtaining gatekeeper permission from the respective organisations, counsellors at the Trauma Centre and RCCs were informed about the study and invited to participate in the study. Counsellors had the right to accept or decline the interview and were ensured that they would not be treated unfairly for whichever decision they took (see information sheet, Appendix K – L).

The only inclusion and exclusion criteria were that counsellors had to speak English and/or Afrikaans, work at one of the identified organisations providing trauma-focused services, and have experience providing trauma-focused counselling to trauma survivors. Counsellors were recruited for the purpose of exploring the research question on the experiences of trauma counsellors in resource-constrained communities and their attitudes and knowledge pertaining to the use of PE for PTSD in South Africa.

A purposive sampling procedure was used to recruit a homogenous group of counsellors (n = 18) at the Trauma Centre and the Rape Crisis Centres in the WC and EC of South Africa (Bless, Higson-Smith, & Sithole, 2014). Six counsellors at the Trauma Centre and 12 counsellors from the RCC agreed to participate in the study (see Table 5.1).

The present study used a large sample (n = 18) to explore the experiences of trauma counsellors. A large sample was chosen due to the varied nature and prevalence of traumatic stress in South Africa (Williams et al., 2007). Therefore, recruiting trauma counsellors
working in different provinces and different socio-demographic locations provided a broader access to the lived experiences of trauma counsellors.

Table 5.1

Demographic Characteristics of Counsellors

<table>
<thead>
<tr>
<th>Variable</th>
<th>n = 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>22–55</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
</tr>
<tr>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>16</td>
</tr>
<tr>
<td>Afrikaans</td>
<td>2</td>
</tr>
<tr>
<td>Both English &amp; Afrikaans</td>
<td>6</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
</tr>
<tr>
<td>Registered counsellor</td>
<td>3</td>
</tr>
<tr>
<td>Social worker</td>
<td>3</td>
</tr>
<tr>
<td>Auxiliary social worker</td>
<td>3</td>
</tr>
<tr>
<td>Community volunteer</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>&lt; Grade 12</td>
<td>2</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>14</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>2</td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
</tr>
<tr>
<td>0 – 12 months</td>
<td>3</td>
</tr>
<tr>
<td>1 year – 3 years</td>
<td>8</td>
</tr>
<tr>
<td>4 years – 6 years</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 7 years</td>
<td>2</td>
</tr>
<tr>
<td>Work context</td>
<td></td>
</tr>
<tr>
<td>Non-governmental organisation</td>
<td>18</td>
</tr>
<tr>
<td>Private healthcare</td>
<td>0</td>
</tr>
<tr>
<td>Secondary &amp; tertiary public health system</td>
<td>0</td>
</tr>
</tbody>
</table>
5.8 Data collection

5.8.1 Semi-structured interviews

Data collection was conducted by means of individual semi-structured interviews. Individual in-depth interviews are recommended in TA as it allows for a thick description of participant experiences (Braun & Clark, 2006). A total of five research assistants (RAs) participated in the study at various times to perform different duties.

All interviews were conducted at the respective organisations. This allowed for minimal disruption and unnecessary financial cost (e.g., traveling cost) for the counsellors. I was familiar with the staff and counsellors of the Trauma Centre. Therefore, the interviews conducted at the Trauma Centre were conducted by an independent research assistant (RA; also referred to as an independent assessor). The RA was a graduate student in psychology completing a master’s degree in psychology. I had pre- and post-interview meetings with the RA to obtain any additional data based on the interview experience for the counsellors and the interviewer. Interviews conducted at the Rape Crisis Centres in Cape Town and Port Elizabeth were conducted by myself as I was not known by the staff and counsellors at the organisations.

An interview schedule was developed (see Appendix M) and had undergone an iterative process of question conceptualisation and refinement. For example, in consultation with my research supervisor, the clarity and relevance of interview questions were scrutinised, and feedback was obtained from a PhD doctoral admissions committee who evaluated the proposal and various aspects of the study, such as the interview schedule.

In addition, I consulted qualitative literature on TA to ensure that the interview schedule would allow for accurate exploration of experiences (see Braun & Clark, 2006; Braun & Clarke, 2019; Clarke & Braun, 2020). The interview schedule enabled the interviewer to remain focused on the research aim. Interview questions for RQ1 asked
counsellors to describe his or her experience of working with trauma survivors, the effect of socio-economic factors on the treatment of trauma, and their knowledge and perceptions of PE as a treatment for PTSD.

In addition, based on initial interviews conducted, and where relevant, questions were modified and refined to better collect qualitative data. Interviewers were also cognisant of allowing flexibility (semi-structured) to enable an authentic and reciprocal engagement during the interviews. Interviews were audio-recorded and transcribed by an independent person (see Appendix M). Audio recorded interviews and transcribed sessions were stored in a password protected Dropbox account owned by me. All participants had the right to request a copy of the audio recording, of which one counsellor at the RCC requested a copy of her interview.

5.9 Trustworthiness of the qualitative data

In qualitative research, the reliability and validity of the data are referred to as the trustworthiness of the findings. Qualitative researchers have recommended various strategies to ensure the trustworthiness of qualitative studies (e.g., Guba & Lincoln, 1994; Shenton, 2004). I attempted to maintain the trustworthiness of the qualitative data and I used several strategies.

I had regular update and or feedback meetings and written consultations with my supervisor about the qualitative phases and interviews. Interviews were audio recorded to ensure accuracy of the data, and I could therefore listen to interviews and check transcript accuracy. Transcripts were made available to the research supervisor to check if necessary. A paper trail of my analysis was kept and saved in a Dropbox account. This was to allow any relevant person (e.g., supervisor) to check the evidence of my analysis procedure. The analysis of qualitative data was checked by my supervisor through commentary on my draft
chapters and supervisory meetings. Lastly, the implementation of TA analytic guidelines ensured that the analysis of the data was conducted according to an established qualitative method such as TA.

Moreover, Yardley (2000) states that a good qualitative study must consider contextual factors to enhance the quality and validity of the research. To address this important aspect, the extant literature on trauma counsellors was perused and integrated in the discussion section of this chapter. This allowed me to establish how and where the current results converge and/or diverges with the extant literature on the experiences of trauma counsellors. Second, the socio-economic and cultural milieu of the participants and counselling centres are also considered in the interpretation of the results and discussion of the data. An awareness of the contextual factors adds to the reliability of the findings (Smith et al., 2009).

5.10 Analysis procedure

TA is a comprehensive and an appropriate qualitative method; therefore, TA was used to analyse the interview data (Braun & Clarke, 2006). TA has a systematic, but also flexible, set of guidelines to analysing qualitative data (Braun & Clark, 2006).

In analysing the qualitative data, the following steps were taken to adhere to TA guidelines, but necessary modifications were considered (e.g., reflexivity) to enhance the rigour and integrity of the analytical process (Braun & Clarke, 2006). Based on the guidelines of Braun and Clarke (2006), first, I read and re-read interview transcripts to familiarise myself with the data. During this initial phase, I also checked the accuracy of the transcripts by listening to the audio recorded sessions whilst reading the transcripts. In doing this, I had the opportunity to re-listen to the voice of the participant, and specific factors such as tone of voice (e.g., inflection) and responsiveness of the participant during the interview.
Second, throughout the initial reading process I made notes on each transcript as notetaking enables creating an overall impression of each participant. Note-taking occurred on hard-copy (See Figure 5.1) and soft copy in electronic version. I could refer to my initial notes throughout the analytic process. Third, I started to identify emerging themes, and superordinate themes for each participant to maintain an idiographic approach and searched for connections across themes in each before moving to the next participant.

Figure 5.1. Example of a hard copy TA analysis – notetaking.

In this phase, the analysis was conducted, and the results section presents a selection of the most pertinent themes in the data corpus of the trauma counsellors. In addition to the guidelines by Braun and Clarke (2006), three coding techniques were also used to analysing an interview transcript (see Smith, Flowers, & Larkin, 2009) (see Figure 5.2). The three ways of enhancing the level of analysis is described as follows:

5.10.1 Descriptive coding

A descriptive code is a brief summary of a certain section on the transcript. This code is usually done in normal font without italics and boldface. The descriptive code allows for
chunks of textual data to be concisely captured and allows the broader text to be more succinct and summary. The descriptive code also assists the researcher to identify emergent themes in the text.

5.10.2 Linguistic coding

A linguistic code, which is done in an *italicised* font, highlights linguistic peculiarities. For example, certain phrase, colloquial words, or metaphors which might add certain nuances to how the participant is articulating his or her experience. A focus on linguistic style may also allow for how the participant might experience the process of thinking about the experience. For example, repetition might allude to some agitation or hesitance. All these subtleties add to the phenomenological nature in which the participant might become aware of his or her unfolding process of experience.

5.10.3 Conceptual coding

Conceptual comments are more hypothetical and interpretive. This allows the researcher to question and reflect on the meaning and peculiarities of the textual data. For example, conceptual coding gave me access to start interpreting the experiences of the participant. This is followed-up in the write-up where interpretation is continued and refined.
The process of identifying themes was an iterative process to enable an accurate capture of pertinent themes. For example, some initial themes were refined, combined and or removed if found to be irrelevant. Lastly, I searched for broader themes across all participants who were interviewed to develop group themes. I was also required to maintain a careful balance between the individual participant and the collective group throughout the write-up of the qualitative results.
At the end of each individual analysis, I wrote a reflective summary of the participant. This assisted me in capturing any pertinent thoughts and interpretations I formulated during the analysis. I consulted the reflective summaries of participants during the write-up of the results and during my discussion section of the data. Engaging in this activity captured pertinent insights related to experiences of the participant and enhanced the understanding and description of participant experiences. Lastly, once a full draft of my analysis was completed, I consulted my supervisor to give critical feedback on the writing of the chapter. I also re-read Braun and Clarke (2006) guidelines, this enabling me to refresh my understanding and re-evaluate my analysis of the results.

The ensuing section reports on the results which provide evidence and discussion of each superordinate theme and themes identified in the data.

Figure 5.3. Emergent themes collapsed into superordinate themes.

<table>
<thead>
<tr>
<th>Emergent theme</th>
<th>Super-ordinate theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selfless – in service of others</td>
<td>in service of others</td>
</tr>
<tr>
<td>History of trauma work</td>
<td>Trauma in context</td>
</tr>
<tr>
<td>Personal calling – to help others</td>
<td>Ideological frame</td>
</tr>
<tr>
<td>Passionate about helping others – genuine compassion</td>
<td>Trauma and the counsellor</td>
</tr>
<tr>
<td>Broader social and political issues</td>
<td></td>
</tr>
<tr>
<td>Compassion is important – helping those who need help</td>
<td></td>
</tr>
<tr>
<td>Feminism! – not just trauma work but fighting for women</td>
<td></td>
</tr>
<tr>
<td>Trauma work is not easy – be aware of the challenges</td>
<td></td>
</tr>
<tr>
<td>Not too positive about the broader social-political systems</td>
<td></td>
</tr>
</tbody>
</table>
5.11 Findings

This section presents the findings of research question one: *How do counsellors experience treating persons who present with symptoms of PTSD living in a resource-constrained context, and what are the attitudes and knowledge of trauma counsellors toward the use of PE for PTSD in South Africa?*

The analysis of the qualitative data identified three superordinate themes which consisted of eight themes (see Table 5.2). The themes are then supported by textual evidence from individual participants to illustrate the trustworthiness of the data. The themes presented below are representative of the experiences of 18 trauma counsellors, and how they made sense of their experiences of working as trauma counsellors in their respective communities.

Table 5.2

*Superordinate Themes and Themes: Trauma Counsellors*

<table>
<thead>
<tr>
<th>Superordinate Themes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Working as a counsellor</td>
<td>Encountering trauma narratives</td>
</tr>
<tr>
<td></td>
<td>Support and resilience</td>
</tr>
<tr>
<td></td>
<td>Treatments for trauma</td>
</tr>
<tr>
<td></td>
<td>Collective approach</td>
</tr>
<tr>
<td>2  Trauma in the social context</td>
<td>Helplessness</td>
</tr>
<tr>
<td></td>
<td>Social factors</td>
</tr>
<tr>
<td>3  Experiences of growth</td>
<td>Helping others heal</td>
</tr>
<tr>
<td></td>
<td>Empowerment</td>
</tr>
</tbody>
</table>

5.12 Superordinate theme 1: Working as a counsellor

In this superordinate theme, there are four themes, namely, *encountering trauma narratives, support and resilience, treatments for trauma,* and a *collective approach.*
5.12.1 Theme: Encountering trauma narratives

In this theme, I describe how participants made sense of how they experienced working with the trauma narratives of their clients. Participants expressed how they became aware of the realities of trauma and violence in society. Due to listening to the experiences of trauma survivors, participants started to reflect on their personal perceptions of safety in the world. Encountering trauma narratives proved to be a difficult experience, irrespective of age, sex, and level of work experience of the counsellor.

Gloria, a 32-year-old social worker, stated, “nothing prepares you to deal with what we see on a daily basis and what we hear on a daily basis”. For Gloria, the reality and the pervasiveness of trauma and violence challenged her assumptions about human value and being safe in the world. Gloria’s sentiments are supported by Adam, a 26-year-old registered counsellor, who stated, “people find it very difficult to survive in this world”. Adam’s use of the word “survive” emphasises the difficulty and desperation trauma survivors might have to endure.

Busi, a 35-year-old registered counsellor, stated that she was introduced to the “reality of the dark world that we actually live in” through the experiences of her clients. Based on the textual evidence, it appears that participants were not fully aware of the pervasiveness, and more importantly, the effect of violence and traumatic stress in society. Therefore, participants were challenged to adapt and reconcile their personal assumptions of the world with what they had been encountering through experiences of their clients.

Furthermore, Gloria, who had worked at the counselling centre for six years, reflected on the responsibility of working as a trauma counsellor, which is to be the only audience to stories of suffering. She stated that: “the most difficult aspect of being a trauma counsellor is being present when people are breaking down…. It’s taxing emotionally, and very difficult because it leaves you vulnerable”. These sentiments are supported by Bongi, an auxiliary
social worker, who worked primarily with rape survivors: “If you are not strong, you won’t be able to do it”.

These extracts illustrate the importance of being compassionate and resilient as a trauma counsellor. Bongi’s reflection highlights how counsellors need to be committed and have the courage to remain supportive and compassionate even when they feel overwhelmed. Bongi’s sentiments are echoed by Mary, a counsellor in her mid-50’s who had more than 10 years of experience working with victims and perpetrators of trauma and violence.

When asked about her experiences of working as a trauma counsellor, Mary reported that: “It’s quite difficult to distance yourself... from hearing these stories”. Mary’s description illustrates how counsellors might need to continuously reflect on how they are coping as counsellors. She also affirms the difficulty of her work and how counsellors can be negatively consumed by trauma narratives. Given the difficulty of listening to trauma narratives, participants had to adapt to the nature of trauma work. The need to acclimatise to the context of trauma counselling also allowed counsellors to realise whether they truly wanted to continue to work in the field of traumatic stress. Nicole, an intern registered counsellor, realised that her initial idea of working in the field of traumatic stress was not an entirely suitable area of work:

Nicole: Before I started, I thought I had a passion for trauma, but that has changed. I do not think I ever want to work with rape survivors...after this, again. It is too heavy, heavy for me.

Interviewer: What is heavy about it?

Nicole: I think with some clients, some clients, you just go home, and you worry... thinking about them.
Nicole’s candid response suggests that working as a counsellor, given its difficult nature, can be an overwhelming experience. For Nicole, using the word “heavy” is symbolic of the emotional weight and burden counsellors may have to carry, and how the experience of “heavy” might be too overwhelming for some. Yet, participants such as Lindsey, a radiographer by profession, Ella, a volunteer counsellor, and Lucy, a social worker, emphasised the importance of implementing firm boundaries in trauma-focused work. To be able to cope with the complexity and the distress of encountering trauma narratives, one should be able to separate work and personal life. Lucy stated that: “the more you do, the more you hear the stories, you adjust to that being the way it is”. Lucy’s comment suggests a process of acclimatising to working as a counsellor, yet Lucy’s comment also indicates a potential risk of accepting or becoming numb to the atrocities people experience. To this end, Busi reflected on the almost inevitability of being affected by working in trauma:

*The burnout rate in this sector is high and I have been affected physically – my health basically. I have found, especially this year. I have found that I become sick quickly.*

*So, I think that is the negative. And especially, one of the things for me is that I’m a new mom and it is my first child so my perspective also changed, and I think that I can relate more to clients.*

In this extract, Busi reflected on how her work not only psychologically affected her but also physically. For Busi, becoming a parent has changed her perspective and approach to her work as a counsellor. Busi’s experience of parenthood in relation to trauma work could have made her aware of maintaining her wellbeing, not just for herself but her child too.

**5.12.2 Theme: Support and resilience**

In this theme I describe how participants reflected on the importance of support and to be resilient. Through reflecting on their experiences of working as trauma counsellors,
participants emphasised the careful balance of self-care and being at psychological risk due to working as a trauma counsellor. Participants spoke about working with trauma narratives as an almost psychologically harmful process. If not cautious, one can be negatively affected as a trauma counsellor. Participants working across all centres emphasised the need for organisational and collegial support as an indispensable coping resource. Emphasising this necessary resource, Busi stated:

_We have a nice support system in the organisation, so you get the opportunity to just cry after a session and not in front of the client. But the cases that we deal with are quite intense, quite complex. It is not single traumas; it is multiple traumas..._

The above extract is evidence that counsellors do find means of support as counsellors, yet it also appears that the nature of their work seems to be a perpetually adverse presence. Participants may not only have to endure difficult trauma narratives but also had to manage the complexity of traumatic stress due to systemic factors such as poverty and limited resources in the communities in which they work. Shannon, a 43-year-old registered counsellor, described her work as “very rewarding and sometimes it’s been damaging” due to “the amount of stories you listen to. And the intensity of people’s cruelty towards each other”. Shannon’s use of the words “rewarding” and “damaging” emphatically demonstrates the balance between risk and reward that participants had to manage as counsellors. The process of encountering the suffering of others, for the counsellors, is clear and has a significant impact on the counsellors’ psychological functioning and physical well-being. The experience of encountering trauma narratives not only forced counsellors to adapt and be resilient, but also made them aware of the inherent psychological risks in working as a trauma counsellor in resource-constrained communities.
5.12.2 Theme: Treatments for trauma

In this theme, I discuss how different psychological treatments were used by counsellors and organisations to treat traumatic stress. The implementation of evidence-based interventions (EBIs) among counselling centres were dependent on prior knowledge (academic level training) and organisational resources. At one organisation, participants reported to use different treatments that ranged from SC, motivational interviewing, narrative therapy, to cognitive behavioural therapy (CBT). Most participants had limited knowledge of EBI’s such as PE and other CBT treatments for trauma. For example, an auxiliary social worker, when asked about PE, stated that she had never heard of PE, and that her training was in “PCA [Person-Centred Approach] and the strength-based [approach]” for trauma. One counselling centre reported that the primary approach of treatment was CBT for PTSD. Participants, however, were not adequately trained in CBT therapies such as PE. Here Adam, a social worker in his late 20s, described the approaches used at the counselling centre where he worked:

*We work accordingly to what we call an operational manual for trauma counsellors. There you will find in several different theoretical approaches, it is just that we have tried to shift our focus to CBT, but we have not been sufficiently trained.*

In this extract, Adam highlighted CBT as the primary approach but also acknowledges that they were not adequately trained to administer CBT. The above extract indicates that counselling centres might adopt an EBI approach to treating trauma, but limited training and supervision reduces the implementation of EBIs in counselling centres. Overall, most participants used a supportive, non-directive approach to trauma therapy. It can be suggested that due to limited knowledge and adequate training in alternative treatments such as CBT, participants had limited ability to adequately implement structured empirically
supported treatments such as PE. As a result, participants who did have some knowledge regarding EBIs were unconvinced regarding the feasibility of using manualised approaches such as CBT in low-resource settings. As Gloria explained:

*So, it [CBT] helps if you’ve got an ideal client, so an ideal client is someone who walks in, they only have one trauma and that’s what you deal with, it works there. But if you have a client who is exposed to trauma, it’s very difficult to use those evidence-based models because they don’t factor in that two weeks’ time the client is going to have another relapse, or they’re going to get another violent act towards them.*

In this extract, Gloria reflected on the context in which she had to work and treat traumatic stress. Her criticisms pertaining to the feasibility of manualised EBIs are crucial, especially if the implementation of EBIs are still considered important. In addition, personal treatment preferences among participants were reported. For example, Ndumi, a social worker who had worked for a year at a counselling centre was familiar with CBT but reported to be apprehensive regarding its implementation as an approach for treating traumatic stress. In this extract, the interviewer is contrasting a structured approach against the non-directive approach of the counsellor, Ndumi responded:

*I think it would be effective with going more with the flow than a structure because I feel that people are unique, so are their experiences. So, we cannot use the uniform for everyone. So, meaning we will not be able to uncover the underlying feelings from clients if we are using a structure...*

Ndumi’s reflection also implies that a structured approach might not explore emotional experiences and deny client individuality. In addition, one of the organisations used a feminist framework to implement trauma counselling for survivors of sexual violence.
Participants reportedly prioritised the need to provide clients with an environment of “safety” and “empowerment” above anything else. Laura, a former social worker with more than 10 years trauma counselling experience, reported that “the feminist approach is very much about empowering…” and an important aspect is that the client “takes control of her own story…”. Here Laura describes an essential aspect of her treatment approach. Similarly, when asked about TFTs such as PE, Thando stated:

You must be very cognisant of the power that was taken off the person, that they did not have any control over anything. ...In terms of the prolonged exposure it would ... then give you much more of what you want.

Thando emphasised the lived experience of sexual violence and experience a loss of self-control. For Thando, the structure and direct approach of PE conflicted with the imperative to providing ‘safety’ and ‘empowerment’ as it provided the counsellor with too much control and not the client. Laura and Thando’s reflections convey a genuine sense of compassion toward clients. Yet their sentiments precluded the potential benefits of empirically supported TFTs. Overall, treatments for trauma varied across participants and counselling centres. Participants had disparate levels of knowledge and training in EBI’s such CBT and PE.

5.12.3 Theme: Collective approach

In this theme, participants emphasised the need for working collaboratively and with the support of broader societal systems. Participants identified a need for support from public institutions such as the police services, medical services, legal services, and the overall role of the provincial and national government. Based on their experiences, participants stated that
the treatment of traumatic stress requires different levels of systemic intervention. Here Shannon emphasises the prevalence of trauma in society:

We put a lot of pressure on ourselves to fill the gap of government. I think we've put a lot of pressure on ourselves to fill that gap if we look at the amount of people needing this kind of service on a daily basis...

This extract not only highlights the need for more resources and support from different stakeholders in society. In addition to the pressure of working within a psychologically high-risk context, participants are under added pressure to meet the growing demands of the communities they serve, which they might not always be able to do. Shannon continues:

We just need more resources. If you look at the trauma centre and staff...they are burning out or at the point of “Ya, I can’t do this work anymore”.

The experiences of the counsellors are beleaguered by contextual and systemic limitations such as human resources and support from government institutions. Here Shannon also highlights burnout as a likely consequence as they are required to provide services with minimal support. Reinforcing the need for a more collectivist approach to trauma, participants were enthusiastic about working on a macro level, conducting group and community-based interventions. However, they were also aware that working outside of the traditional therapeutic frame had its own limitations and possible risks. Participants expressed an awareness of the dangers and challenges of working in high-risk communities, and the importance of peer and organisational support for their well-being. Participants had to fill the gap to provide trauma services outside of the confines of the counselling centres.
Busi stated that: “the outreach programme we do is so essential because people can’t come in, they don’t want to leave, so we have to find a way to go to them”. Given the limitations and the high demand, counsellors are required to work in alternative ways to provide support to those individuals and communities affected by violence and traumatisation. The theme underscores an important element in treating traumatic stress in South Africa. Participants, through their experience, had come to realise that treating traumatic stress is systemic, which requires a hybrid between the conventional and the innovative to work together. The following theme describes how trauma is connected to the larger socio-economic context.

5.13 Superordinate theme 2: Trauma in the social context

This superordinate theme describes how traumatic stress is embedded across the different social systems in society. Three sub-themes are included, namely, helplessness, trauma as a stigma and trauma and social systems.

5.13.1 Theme: Helplessness

In this theme I describe how participants reflected on how social factors can precipitate and maintain traumatic stress in individuals and the broader social context. The following extract illustrates how Vuyo, an auxiliary social worker who worked mainly with victims of intimate partner violence (IPV), reported on her experience of how factors such as poverty in low resource settings affected trauma work. She stated: “you find out sometimes it’s the partner who's working, the one who’s [the] perpetrator, then she's the victim. So, she is depending on the partner”. Vuyo reflected on the impact of financial dependence and its effect on clients accessing pro-bono trauma-focused treatments in resource-constrained communities.
Vuyo’s experiences suggests a sense of helplessness among clients and within the counsellor. She stated “I wish I could go back and convince her, “we are not trying to separate you, we trying to get your relationship to be happy, even to involve your partner”, but it’s difficult for them.”. Vuyo expressed a desperate need to offer support. Yet, financial dependency and shelter may affect how trauma survivors understand and access trauma services. Considering the low resources within communities, traumatic stress appeared to be perpetuated through socio-economic factors such as poverty. Yet socio-economic factors such as financial dependency and shelter affect how trauma survivors understand and access trauma services. For example, Busi stated that “parents are so traumatised that they cannot go [to the shop]”, and that community members are rendered helpless by their experiences and are unable to engage in activities of daily living.

These reflections illustrate how traumatic stress is entrenched in the social context which can maintain traumatic stress in the individual and broader community. Given these circumstances, the counsellors experienced feeling helpless and distressed. Without the contextual resources within communities, traumatic stress appears to be perpetuated through socio-economic factors such as poverty and social services. Busi’s observation captures the effect of traumatic stress on the individual, the family and community system:

...people in these communities they suffer due to the violence but in ways you can’t explain. Where a lot of people say, “I’m hungry.” And you have to ask, “Why are you hungry?” and it’s not because there’s no money and it’s not because the parents are neglectful, it’s because they cannot leave their house to go to the shop. The money is there, the parents are caring, but the parents are so traumatised to go to the shop.

The above extract poignantly describes the far-reaching consequences of traumatic stress in the individual, family, and community context. Further, the previous extracts
highlight the impact of the social context of experiences of trauma, which led counsellors to feel helpless and frustrated. The following theme highlights the effect of stigma and its relation to trauma in communities.

5.13.2 Theme: Social factors

In this theme I describe how participants referred to various social aspects in relation to trauma. First, social stigma and misconceptions about mental illness perpetuate the adverse effects of traumatic stress in communities. Busi identified the tendency among clients to “normalise” their experiences of violence as “trauma is part of the system of the country, it is part of the family system, it is part of the school system where violence is happening every day”. The normalisation of trauma resulted in clients’ failure to access services, thus possibly creating an added barrier for counsellors to overcome.

Participants reported that clients and communities have difficulty in speaking about traumatic stress compared to physical suffering. Busi stated that when it comes to mental health: “they are sceptical they don't think this is something they want...”. Here Busi describes how mental health services are perceived as unnecessary in the communities in which she has worked. Dumi, a 40-year-old registered counsellor, stated, “people see a stigma when you go for counselling, they think there's something wrong in your head...they are still scared of that counselling term”. Trauma in these communities, and mental health in general, is still stigmatised, not to be talked about or engaged with by the community.

To this end, trauma survivors are situated in a complex system which precipitates and perpetuates experiences of trauma for both the counsellor and the client. Given this perceived cycle of trauma in these communities, Gloria mentioned that people resorted to maladaptive ways of coping: “the best way to deal with it is to just blind yourself to it. Learn to live and ignore...people use drugs to numb themselves”. Gloria highlights a somewhat inevitable
consequence of not only traumatic stress, but the added pressure of a context that perpetuates the experiences of trauma.

Second, participants affirmed that low-income communities might have different experiences and occurrences of trauma compared to more affluent communities. Shannon stated that: “the levels of rage in our communities” are indicative of the complexities of extreme traumatisation and depravity. For example, Ella, a volunteer trauma counsellor, stated that: “…there is a lot of violence going, especially [on] this side of the N2”.

Yet counsellors reported that the presence of violence and traumatisation cuts across all systems of society, which makes trauma more pervasive and concerning. For Lucy, a social worker, she provided services to women “from a variety of race groups and cultures”, and her observations made her realise that irrespective of race and religion, “the issues are much the same”. In her experience, trauma does not appear to be only ascribed to a certain race, gender, or religion. Lucy states that traumatic stress and violence affects all persons irrespective of social systems such as gender, race, and religion. Furthermore, Mary, a volunteer counsellor who has worked with both trauma victims and perpetrators of violence for more than 10-years, describes:

I can see somebody who is a wealthy White teen from Constantia who does not want to tell her parents she was raped…then I might see a Muslim woman from Tanzania who is migrant or a refugee, then I might see a Coloured woman, you know, who lives in Hanover Park and whose daughter or herself was gang raped by 15 gangsters, and held hostage for a week, so it’s so diverse.

In this extract, Mary vividly describes the pervasiveness of traumatic stress in the communities in which she works. In her description, Mary also alludes to how misconceptions may exist in society in assumptions that trauma such as sexual violence
might be predominantly ascribed to a certain racial or social group in society. She emphasises that trauma, again, can affect any person irrespective of race and socio-economic status.

Lastly, trauma is understood differently across the various social systems. For example, social systems such as culture or gender may influence how persons understand traumatic stress. Thando reported that culture, among others, can also influence how clients process experiences of trauma and access treatment, for example, “women might open up more to it [counselling] but the Black man’s far from it. Because obviously a Xhosa man, I’m not, maybe I’m generalising...because there’s a certain structure or certain difference that is really enforced into them”. Thando points out how culture and gender can determine how persons understand and engage with trauma services.

Furthermore, Shannon states that trauma is “normalised, especially in African culture. Who are you going to tell that I am traumatised? What is that?”. Here Shannon also alludes to how persons might feel isolated and marginalised if they talk about trauma in their communities. Thando and Shannon’s sentiments highlight how persons from certain groups in society think about trauma differently. These reflections provide evidence for this theme. Traumatic stress is interlinked to the social, economic, and cultural systems in society. In the following theme, I discuss how participants, irrespective of the challenges they have encountered, experienced personal growth.

5.14 Superordinate theme 3: Experiences of growth

In this superordinate theme, I describe how participants experienced personal growth working as trauma counsellors. The two themes are helping others heal and empowerment.
5.14.1 Theme: Helping others heal

In this theme I describe how participants also experienced personal and professional growth. Participants reflected on how working as counsellors can be arduous, but also that they have grown professionally and personally through their experiences as trauma counsellors. Notwithstanding the challenges of limited resources, participants had the necessary gumption and maintained a positive perspective toward providing a service, albeit limited. The nature of the work requires creative and alternative ways of working, especially in resource-constrained contexts. A sense of hope is still conveyed by Busi, who stated that: “with trauma there’s a possibility of recovery from that trauma, so, for me, it felt like the person had more hope”.

Bongi, a volunteer counsellor who initially worked in the private corporate sector but was unexpectedly retrenched, found it fulfilling to see the growth and recovery in others. She stated:

When a person comes back and say “thank you” or sending you a message or you do a home visit – “No I’m fine, I’m really fine, I’m really happy”.

This extract highlights the process of how participants moved from the challenge of adjusting to the nature of trauma work, working in challenging communities, to the experience of witnessing how they can positively influence those whose lives have been violently disrupted. The following theme highlights the personal growth of counsellors.

5.14.2 Theme: Empowerment

The participants reflected on how working as a counsellor gave them an opportunity to empower themselves as individuals. Given the diverse backgrounds of the participants,
their experiences of personal growth differ from personal upliftment to others merely wanting to support trauma survivors and to contribute to the upliftment of communities.

Ella, a volunteer counsellor of three years, admits that she never thought she would have wanted to work with trauma survivors. Ella stated that: “I thought to myself, ‘Me? Rape? Never!’”. Her reluctance was linked to what most counsellors must have initially thought about trauma work and that working with trauma survivors is “really now too heavy”.

Before working as a counsellor, Ella was unemployed and experienced financial difficulty. Ella decided to be proactive and find work wherever she could, even in a field in which she thought she would not be able to manage. Ella’s reflections provide insight into her ambition to grow as an individual, and not merely work as a counsellor or as an employee of an organisation. Ella’s experiences highlighted a personal desire to grow as a person, as she stated: “…just empower myself”.

The motivations to work as counsellors are disparate and certain participants, such as Ella, Ronel, Geraldine, Thando, and Bongi, saw this as an opportunity to empower themselves. Some of the participants also reported having had their own personal trauma and adversity. For example, Ronel’s motivation to work as a trauma counsellor was due to her personal needs to better understand trauma recovery. Ronel, a volunteer counsellor, reflected on her experience of trauma:

Ronel: I have never had counselling.

Interviewer: Sure!

Ronel: So, in the training, we got to have counselling. I got my healing through the counselling...

Interviewer: Okay, okay...
Ronel: *Because sometimes things happen to you when you’re younger and your mind is blank to what happened...*

Interviewer: *Sure!*

Ronel: *But when you get older...*

Interviewer: *Ya.*

Ronel: *You start to feel pain, past pain.*

Interviewer: *Ya.*

Ronel: *And it was just amazing to me and I just cried.*

In this extract Ronel reflects on her own trauma and how her unresolved experiences of trauma eventually affected her as an adult. Becoming a counsellor and helping others, Ronel had the opportunity to help herself and grow from her experiences of trauma.

Within the context of the emotional intensity and psychological risks linked to working as a trauma counsellor, participants revealed experiences of personal growth, and for some, post-traumatic growth.

### 5.15 Discussion

In response to the burgeoning impact of PTSD in South African society and the need for trauma-focused services in resource-constrained settings, it was necessary to explore and understand the experiences of trauma counsellors who provide services at a primary care level as it would provide insights into the experiences of counsellors, the nature of traumatic stress, and how psychological trauma in resource-constrained communities.

The findings of the current chapter not only support some of the existing findings of the experiences of trauma counsellors but adds to our understanding on how trauma counsellors experience treating psychological trauma among persons from a contextual
perspective in a low-resource setting. Studies in the South African context over the last 20 years appear to have mainly focused on issues on the risks associated with trauma counselling (e.g., burnout) (e.g., MacRitchie & Leibowitz, 2010; Sui & Padmanabhanunni, 2016). The findings of this phase of the study contributes to the limited number of qualitative studies reporting on the experiences of trauma counsellors working at primary care level in South Africa, and how contextual factors affect the experiences of counsellors and the process of treatment.

The superordinate theme of working as a counsellor highlighted crucial themes of the experiences of counsellors. Over the past two decades, researchers and practitioners have identified negative and positive responses associated with the experiences of trauma counsellors. The theme of encountering trauma narratives described the experiences of participants listening to and working with trauma narratives. This theme supports the existing findings that counsellors are at risk of developing symptoms of vicarious traumatisation (VT) (McCann & Pearlman, 1990), secondary traumatic stress (STS) (Figley, 1995) and compassion fatigue (CF) (Figley, 1995) due to the vivid descriptions of traumatic events by their clients (Silveira & Boyer, 2015). Participants’ experiences of working as counsellors indicate a persistent risk, and sometimes threat, of VT.

This finding also concurs with findings by Lu, Zhou, and Pillay (2017) who found that trauma counsellors feel overwhelmed by their initial encounter with trauma narratives. All counselling work comes with difficulty and complexity for the counsellor, but trauma counselling can be more challenging due to the exposure of indirect traumatisation for the counsellor (Ling, Hunter, & Maple, 2014). For example, cases of sexual abuse and incest are the most difficult forms of trauma to work with for counsellors (Silveira & Boyer, 2015).

In addition, the data of the present study indicate an additional risk-variable for these participants, which is working with the clients who experience continuous trauma exposure.
and contextual limitations which precipitates and/or perpetuates traumatic stress. For example, the participants felt overwhelmed and distressed knowing that clients would return to contexts where re-traumatisation had an increased probability or that clients remained in a context of trauma due to contextual factors.

Straker and Moosa (1994) identified that clinicians reported feeling a sense of powerlessness when working in contexts of socio-economic and political oppression. As a result, these factors contributed to additional difficulty for the participants as it would adversely affect the outcome of treatment and the functioning of the client. To this end, counsellors who work in resource-constrained contexts are at increased psychological risk of VT and helplessness (Straker & Moosa, 1994). Consequently, counsellors must be resilient to work in a context where the outcome of treatment is adversely affected by contextual risk factors such as limited resources and community violence (Benjamin & Carolissen, 2015).

The theme treatments for trauma highlighted several factors that contribute to the treatment of traumatic stress. Overall, the treatment of trauma among counsellors and counselling centres were varied and devoid of the current treatment guidelines for PTSD. For example, organisations may not consider or be aware of advances in assessment and treatment due to a commitment to an ideological approach to treating trauma, which might not allow for best practices to be incorporated in the treatment of trauma (see Courtois et al., 2017; Foa, Gillihan et al., 2013).

The use and knowledge of empirically supported treatments such as PE an CBT was limited. This is due to various factors such as organisational culture, individual training level, and organisational resources for training and development. Due to their limited knowledge, participants questioned the feasibility of manualised treatments in low-resource settings with ongoing adversity. Participants also highlighted the need for multi-level interventions for trauma. In addition to standard trauma-focused treatments, participants highlighted the need
for a collective approach to the treatment of traumatic stress. This highlights the notion that trauma is systemically embedded and therefore requires a collective approach to prevention and intervention.

Despite the challenges faced by the participants, the results also illustrated how participants had experiences of personal growth and support and resilience irrespective of the adversity. These themes highlighted aspects of growth and healing for the participants and the communities in which they worked. In addition to the potential adverse experiences of trauma counselling, positive experiences are associated with trauma counselling, such as vicarious resilience (Hernández, Gangsei, & Engstrom, 2007), and vicarious posttraumatic growth (Calhoun & Tedeschi, 1996). Silveira and Boyer (2015) found that counsellors also reported being inspired by the strength and resilience of their clients, resulting in experiences of hope and optimism among trauma counsellors.

Trauma counsellors must develop and implement adequate strategies of self-care and have enough organisational support, among others, to mitigate the risk of VT (Day, Lawson, & Burge, 2017). Moreover, participants demonstrated a clear awareness of the context they worked in and a firm appreciation for the support they required and received from peers and supervisors. The overall commitment of the participants is in line with the literature on positive experiences in trauma counselling (Ling et al., 2014; Lu et al., 2017). Given the challenges experienced by counsellors, they found personal opportunities for growth in working as counsellors, which allowed them to grow as people and professionals.

Lastly, the superordinate theme of trauma in the social context provided a broader view of how traumatic stress manifests in the different communities in which counsellors worked. The contextual factors were found to be interlinked with the experiences of trauma counsellors and how the treatment of trauma occurs. The adverse effect of the social context on the experiences of trauma counsellors have been reported in societies of political conflict.
such as Chile (Comas-Dias & Padilla, 1990) and South Africa (Benjamin & Carolissen, 2015; Straker & Moosa, 1994). Traumatic stress is not necessarily confined to the micro system of the individual but includes the broader systems of society (Benjamin & Carolissen, 2015). Koenen et al. (2017) reported that few studies have explored the socio-demographic correlates and the persistence of PTSD. The experiences of counsellors working in resource-constrained communities allude to how socio-demographic factors precipitate, and to some degree, perpetuate PTSD in communities.

Counsellors were required to adapt to the contextual challenges of work and how trauma is embedded within the larger macro system of society. Participants also reported that trauma and violence also transcend the social boundaries of race, gender, and socio-economic status. However, it seemed that certain types of traumatic experiences might be more prevalent in certain contexts due to social determinants such as poverty and social resources such as inadequate policing. For example, the reporting of sexual violence seemed to be ubiquitous, but the occurrence of armed robbery or gang related violence were linked to specific communities with lower levels of social resources (Benjamin & Carolissen, 2015).

Participants also reported that social stigma, continuous exposure to violence, poverty, cultural practices, and limited social resources precipitated and or perpetuated traumatic stress. For example, treating trauma in a multicultural context requires that counsellors and clients be aware of how culture can mediate the treatment of traumatic stress. Participants reported that clients might not have the needed support from their community or family due to cultural opinion (Benjamin & Carolissen, 2015; van Rooyen & Nqweni, 2012).

Lastly, despite having a progressive mental healthcare act, South African mental health services at primary care level are not adequately meeting the demands to provide access to mental health facilities and treatment (De Kock & Pillay, 2017). The investigation into the status of mental healthcare in South Africa found several shortfalls in mental
healthcare in South Africa (SAHRC, 2019). Most notably, the status of mental healthcare in South Africa is associated with prolonged neglect of policy implementation (SAHRC, 2017).

As a result, the experiences of the counsellors appear to be underpinned by the difficulty of working with traumatic stress and the risk of vicarious trauma. Yet the social context of poverty, limited resources, and a pervasive sense of trauma exposure appear to perpetuate the adverse effects of traumatic stress among clients and counsellors who work in low resource communities. The findings of this phase of the study suggest that counsellors working in resource-constrained communities carry a double burden, which is the risk of vicarious trauma and experiences of helplessness due to the impact of contextual factors such as poverty and increased levels of trauma exposure.

5.16 Chapter summary

The data discussed in this chapter highlight the challenging and rewarding nature of trauma counselling in a resource-constrained context characterised by continuous levels of community violence and limited resources. The findings of phase 1 support the notion that working in trauma requires resilience. Yet these counsellors have an added burden of not only working with challenging trauma narratives, but also of enduring the adverse effects of contextual risk factors. In providing trauma services, participants also experience personal growth in serving trauma survivors. The use of empirically supported treatments such as PE requires substantive implementation at an educational level, adequate training, and continuous support for adequate implementation to occur. In addition, participants highlighted that treating traumatic stress does not solely occur in isolation. The prevalence of traumatic stress in these communities is systemically embedded, which requires various public service stakeholders to enable the effective provision of trauma counselling services in
low-income communities. The following chapter presents the research design of brief PE intervention.
Chapter 6

Phase 2: PE Intervention – Research Design

6.1 Introduction

This chapter presents an overview of single case experimental design and a rationale for the chosen design of phase 2. Thereafter, the intervention procedure for this phase of the study is described, with an overview of the data collection and analysis procedures. The results of the brief prolonged exposure intervention are discussed in Chapter 7.

6.2 Overview of single case experimental design (SCED)

To investigate the research hypothesis of the study – *Trauma survivors who receive six sessions of brief PE will have reduced symptoms of PTSD, depression, and anxiety at the end of treatment and maintain symptom reduction at a three-month follow-up* – a quantitative method, namely single case experimental design (SCED), was used to investigate the research hypothesis.

SCED has a long history in behavioural and experimental psychology, as evidenced by the early works of behaviourists and experimental researchers (Kazdin, 2019). The fundamental principle of SCED, which is to evaluate the causal relation or effect between an independent variable (i.e., PE) on a dependent variable (i.e., PTSD symptoms), can be found in the early works of Watson (1916) and Skinner (1953) (Richards et al., 1999).

Since the latter half of the 20th century, SCED has had various names. Single case research has also been known as single-subject; case-series design; and interrupted time series (Barlow & Hersen, 1984; Kratochwill & Levin, 2014; Richards et al., 1999).

It is important to state that SCED is not analogous to case study research (Kratochwill & Levin, 2014). Case study research uses several data sources such as interviews,
observations, and archival data, which can be a mix of qualitative and quantitative data, to explore and describe a social phenomenon (Yin, 2013). In the case of SCED, the primary form of data is quantitative based on assessment instruments and interventions, and analysis can either be a traditional visual inspection, statistical models, or a combination (Barlow et al., 2009).

The aim of SCED, which is different to case study research, is to ascertain a causal relation between two variables based on the principles of experimental research (Barlow et al., 2009; Kratochwill & Levin, 2014). In the current research, the term single case or single case experimental design will be used as an umbrella term to refer to the implemented research design of this phase of the study.

6.2.1 SCED features

A single case research study contains four essential features, namely, a dependent variable (DV) (e.g., PTSD), an independent variable (IV) (brief PE), assessing the functional or causal relation between the DV and IV, and a dimension of predicted change in the results (e.g., a positive decrease in symptoms of PTSD after treatment) (Kratochwill & Levin, 2014). These features make up the design of a SCED study, which can be considered to be experimental research (Campbell & Stanley, 1963; Richards et al., 1999).

6.2.2 Repeated measures – Replication

Single case research is distinctly known for the use of repeated measures to observe a treatment effect within a specific participant or across participants. Additionally, participants in SCEDs also serve as their own control to demonstrate a causal relation between the DV (PTSD) and the IV (PE) (Barlow et al., 2009; Kazdin, 2019; Kratochwill & Levin, 2010). These two features of repeated measures and cases as their own control provide an
opportunity for replication of the treatment effect within and across cases (Lane & Gast, 2014). For example, when a single participant exhibits symptom reduction across various measurements, it can be argued that a positive downward trend is observed. This trend is supported and strengthened when similar reductions are observed across participants.

6.2.3 Sample size in SCED

Single case research samples can range from a single case or subject to a group or even a community, but generally consists of small samples to demonstrate a causal relation (Kratochwill & Levin, 2014). The use of smaller samples, which is different to larger samples in group designs, allow for a more detailed observation of participants before, during, and after treatment compared to only observing and comparing mean scores, as found in larger group-based studies (e.g., RCTs) (Barlow et al., 2009; Kratochwill & Levin, 2014).

The focus on single participants also enables researchers to consider and describe demographic, contextual, and process orientated data for each participant compared to only reporting on mean scores (Richards et al., 1999). For example, a more detailed reporting and discussion can be provided to better understand the outcomes of the intervention. The use of SCED is beneficial for accruing preliminary evidence of an intervention before advancing to more complex and costly intervention studies such as RCTs (Kratochwill & Levin, 2014).

6.2.4 Brief overview of SCED designs

Several core designs are found in SCED, namely, A-B-A Withdrawal design, multiple baseline design, changing criterion design, and alternating treatment designs. An A-B or A-B-A withdrawal design is known as the basic intervention design in SCED (Hersen & Barlow, 1976; Kratochwill & Levin, 2014; Richards et al., 1999). Multiple baseline design,
changing criterion and alternating treatment designs are considered variations of a standard withdrawal design and can be applied in various research settings.

6.2.4.1 Multiple baseline design (MBD)

A multiple baseline design (MBD) aims to establish an a priori by implementing multiple baselines within the study and participants (Barlow et al., 2009). For example, an MBD would have three or six baseline assessments per participant to establish the presence and stability of the DV before the intervention is introduced. The number of baseline assessments also vary among participants to establish the presence of the DV and the predicted effect of the IV, once introduced. Therefore, an MBD can appear to be several withdrawal designs (A-B designs) repeatedly conducted in one study and emphasises the presences and stability of a baseline (Barlow & Hersen, 1984; Kazdin, 2019).

6.2.4.2 Alternating treatment design (ATD)

Barlow and Hersen (1984) reported that despite the multiple historical developments in SCED, the field progressed by producing and refining designs such as the alternating treatment design (ATD). The essential feature of an ATD is rapid alternating or changing treatments or interventions provided during an intervention study (Barlow & Hersen, 1984; Barlow et al., 2009). For example, two behaviour modification programmes can be introduced at different times (days or weeks) to establish the causal relation between the DV (disruptive behaviour in a classroom) and the IV (behaviour modification programmes). The introduction of an ATD also allows for the elements of randomisation of treatments and the use of statistical analysis in SCED (Edgington, 1996).
6.2.4.3 Changing criterion design (CCD)

This design is not frequently used and considered somewhat idiosyncratic (Horner & Spaulding, 2010). The defining feature of this SCED is its focus and assessment on the effect of varying criterions on the DV. For example, if components or features of a treatment programme were changed during treatment, it would assess for possible changes in the DV. Another, and more specific, example would be assessing the effect of using all the components in the PE programme (i.e., psychoeducation, in vivo exposure, and imaginal exposure) on PTSD compared to only using certain components (i.e., psychoeducation and in vivo exposure). The changing criterion design has a more specific focus on variables within the IV and how it relates to changes in the DV (Horner & Spaulding, 2012).

6.2.4.4 Withdrawal design (WD)

The study used an A-B-A withdrawal design (WD) (Hersen & Barlow, 1976; Kratochwill & Levin, 2010; Richards et al., 1999) to investigate the causal relation between a brief PE programme (IV) and persons presenting with PTSD (DV) (see Figure 6.1). A WD consists of a baseline phase (A) and an intervention phase (B), yet a modified WD was chosen to mitigate threats to validity of the study and to maintain good ethical practice.

As seen in Figure 6.1, the WD in the study consisted of a baseline phase (A) which included one retrospective assessment and collection of data regarding the onset and maintenance of the DV (PTSD), a six session intervention (B) with continuous observations or measurement of the DV throughout the intervention (A), a post-intervention assessment (A), and three-month follow-up assessment (A).
<table>
<thead>
<tr>
<th>Phase – A</th>
<th>Phase – B</th>
<th>Phase – A</th>
<th>Phase – A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Intervention</td>
<td>Post-intervention</td>
<td>3-M/F</td>
</tr>
<tr>
<td>O</td>
<td>O/X O/X O/X O/X O/X O/X O/X</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

O = Observation
X = Intervention
3-M/F = 3 Month Follow-up

*Figure 6.1. Single case research – ABA Withdrawal Design.*

### 6.3 Rationale for using an ABA withdrawal design

SCEDs have been used in various disciplines ranging from remedial education, neuropsychology and rehabilitative settings, behaviour modification, and psychotherapy (Kratochwill & Levin, 2010). According to Barlow and Hersen (1984), the selection of a SCED is based on the nature of the research question.

In the present study, the use of an ABA WD was carefully considered based on the research aim and research setting. For example, in an educational context, assessing the effectiveness of a behaviour modification programme (IV) for classroom discipline (DV), one can use any of the abovementioned SCED designs. Yet, assessing effectiveness of a manualised psychotherapy for the treatment of PTSD, only certain SCEDs may be feasible and or ethical due to the nature and process of psychotherapy, and the research setting. For example, a behaviour modification programme can be implemented by using an MBD or an ATD design, but the same may not necessarily be feasible for psychotherapy research and single case research. For example, using an ATD in psychotherapy may not be feasible, as changing the focus of psychotherapy during the intervention phase (i.e., from PE to art therapy) may not always be feasible or ethical, as in the case of changing a behaviour modification programme in a classroom context (see Smith, 2012). Therefore, the use of an ABA withdrawal design in the current study allowed the researcher to use a SCED and uphold the standard practice of PE for PTSD.
In the current study it was important to use a design that would adhere to the standard practice of psychotherapy research, a natural setting, and ethical standards. The use of an MBD was not entirely feasible to continuously assess participants for three weeks or six weeks to ascertain the presence of a PTSD diagnosis (DV). Standard psychotherapy research requires one baseline assessment using psychometrically validated assessment instruments to retrospectively establish a diagnosis (Foa & Meadows, 1997). The use of an ATD would also not have been feasible due to the need to ascertain the effectiveness of only PE, and not PE compared to a different psychotherapy. In addition, the use of an ATD would also not have been feasible in the current research due to the required time needed in psychotherapy research to ascertain the treatment gains of psychotherapy. Therefore, as a pilot and feasibility study the selection of a standard ABA design, which can also be considered an interrupted time-series design, was more appropriate as it had methodological rigour and maintained ethical practice in terms of psychotherapy research (Barlow et al., 2009; Campbell & Stanley, 1963).

6.4 Phase procedure

6.4.1 Intervention clients

Clients were recruited from the Trauma Centre in Cape Town and the Rhodes University Counselling Centre in Grahamstown, EC. The recruitment, screening, inclusion and exclusion of participants in the intervention was based on routine clinical processes at each of the referring sites (Trauma Centre & Counselling Centre). This was done to simulate a real-world clinical practice approach in the current phase of the research, therefore, the use of an ABA withdrawal design was more appropriate (e.g., Rauch et al., 2009). For example, various public and private organisations would refer persons to the Trauma Centre, for
example, South African Police Services (SAPS), and clients at the Counselling Centre would be self-referred or referred by medical or health professionals.

A non-probability, purposive sample ($n = 12$) enrolled in the intervention, and only seven participants participated in the post-intervention interviews (post-intervention interviews are discussed in Chapter 9). An estimated total of 45 referrals were received from the Trauma Centre and Counselling Centre. All referred persons were contacted primarily via telephone, and some via email, to set up an appointment for a screening meeting with the PI or a RA.

In total, 24 responded and agreed to the initial invitation and were screened, 14 were eligible to participate and only 12 started treatment, and nine participants completed the intervention (see Figure 6.2). Some referrals could not be screened due to several reasons, namely, (a) contact details were incorrect or no answer; (b) did not attend screening session; (c) already in treatment for trauma; (d) could not attend due to travelling distance; and (e) was not interested in participating.
Figure 6.2. Intervention phase procedure.

At the Trauma Centre, the PI met with the director of the Trauma Centre and a senior counsellor to explain the purpose of the study and what the inclusion and exclusion criteria were (discussed below). Based on the inclusion and exclusion criteria of the study, basic contact details of prospective participants were provided to the PI. Prospective participants were contacted telephonically or via email to set up a screening meeting (Screening Instrument – Appendix N). Clients were only considered for a screening meeting and/or
participation if the index trauma had occurred more than four weeks prior to the screening (Foe, Hembree, & Rothbaum, 2007). Screening meetings were either conducted by the PI or a RA. In Cape Town, the screening meetings occurred at the Trauma Centre.

At the Counselling Centre, after presenting the purpose of the study and the inclusion and exclusion criteria to the staff of the counselling centre, all qualified staff (counselling psychologists and intern counselling psychologists) agreed to refer suitable prospective participants for a screening session with the PI or a RA. Referred clients attended a screening session at the office of the PI. Clients who declined to be screened or participate had the right to apply and access services at the Counselling Centre and or Trauma Centre.

A typical clinical sample was considered with persons who reported single or multiple traumas, which could have occurred at any point in their lives. This was deemed to be representative of clinical practice in most contexts in South Africa (Herman et al., 2009; D. R. Williams et al., 2004). Clients reported having never been treated using PE therapy for PTSD, although some reported having been in SC previously for major depressive disorder.

Clients who participated and completed the intervention were also invited to participate in a post-intervention interview to explore their experiences of PE as a trauma therapy. A detailed discussion of the interviews conducted with the clients is provided in Chapter 9, with the results and discussion of the interviews.

6.5 Inclusion criteria for clients

Males and females (South African and/or Non-South African, ≥ 20 – ≤ 55 years of age) must report to have directly experienced or witnessed a traumatic event in their lifetime (serious physical injury or life threatening) and have a total score of 33 or more on the PTSD Checklist-DSM5 (PCL-5) (all measures are further discussed under the section for assessment measures). Participants were required to speak English and/or Afrikaans. Clients
recruited at the Trauma Centre were required to live in the northern suburbs, southern suburbs, and/or Cape Town area. Clients recruited from the Counselling Centre were required to reside in the Grahamstown area. This requirement was implemented to mitigate any transportation issues regarding attending sessions. Clients from the Cape Town area received a standard financial refund for travel costs at the end of each session. Clients from the Grahamstown area were offered but declined a refund as they stayed near the Counselling Centre.

6.6 Exclusion criteria for clients

Clients were excluded from the study if they had a current primary comorbid diagnosis of Schizophrenia and related disorders, Bipolar Mood Disorder, current/on-going interpersonal violence, traumatic brain injury, or some neurodevelopmental disorders, or if they had suicidal or homicidal ideation with intent. Clients who had comorbid symptoms of depression or anxiety were not excluded as depression and anxiety are commonly associated with PTSD (American Psychiatric Association, 2013). Clients who had terminated psychotherapy within the last three months for PTSD or any other common mental disorder (depression or anxiety) were excluded. Persons who had started using psychotropic medication within the last two months were also excluded. Two participants had started using psychotropic medication at the commencement of the intervention and were required to inform the PI if the pharmacotherapy had changed during the intervention, which did not occur.
6.7 Data collection

The intervention phase of the study had several data points. These data points were at (1) baseline; (2) during the intervention self-report measures were completed before sessions, (3) post-intervention assessment, and (4) at three-month follow-up.

Data collection for the baseline, post-intervention, and three-month follow-up was conducted by five RAs who had no prior knowledge of PE and were blind to the treatment. RAs (independent assessors) were postgraduate psychology students who were either completing an honours or a master’s degree in psychology. RAs were trained to administer the assessment measures and ethical considerations by the PI and received ad-hoc supervision throughout the assessment procedures. RAs manually scored all measures which were collected by the PI at scheduled meetings. All quantitative data were scored and captured by the PI on a Microsoft Excel document and stored in a password protected Dropbox account owned by the PI. Accuracy of data capturing was checked by reviewing the captured data against the existing document to ensure scores were accurately and correctly captured.

6.8 Assessment measures

The use of valid and reliable assessment measures is an integral part of intervention research (Foa & Meadows, 1997). The use of structured, semi-structured interviews and self-report measures were used in the development of the most recent APA clinical practice guideline for the treatment of PTSD (Courtois et al., 2017). In effect, over the last three decades several assessment measures have been developed and applied in various contexts and populations to screen for PTSD (Brewin, 2005; Spoont et al., 2015). Foa and Meadows (1997) recommend that instruments used in intervention studies are reliable and valid. In other words, instruments must demonstrate reliable sensitivity, which is to accurately detect a
person with a disorder, and specificity, which is to accurately detect a person who does not meet the diagnostic criteria of a given disorder (Forkmann et al., 2009).

The publication of the DSM-5 required the revision of assessment measures to be aligned with the new classification criteria of PTSD. Examples of these are the Posttraumatic Symptom Scale Interview – DSM5 (PSSI-5) (Foa et al., 1993; Foa et al., 2015) and the Posttraumatic stress disorder Checklist for DSM-5 (PCL-5) (Blevins, Weathers, Davis, Witte, & Domino, 2015), among others. Recently, the use of PCL-5 has been tested in non-Western contexts such as the Kurdistan region of Iraq (Ibrahim, Ertl, Catani, Ismail, & Neuner, 2018). Ibrahim and colleagues (2018) translated the PCL-5 into Arabic and two Kurdish dialects, and used trained interviewers to assist (n = 206) adults to complete the self-report measure. Ibrahim and colleagues (2018) found that the PCL-5 had high internal consistency (alpha = .85) with adequate convergent validity. Using the cut-off score of 23 which attained the optimal balance of sensitivity and specificity (area under the curve = .82, p < .001; sensitivity = .82, specificity = .70) (Ibrahim et al., 2018).

In order to assess for PTSD (primary outcome), depression and anxiety (secondary outcomes), four clinical instruments were selected based on their psychometric properties and their use in past and current research on PTSD (International Test Commission [ITC], 2014). Prospective clients attended a screening session with a RA or the PI. Participants were asked questions, based on a screening tool (see Appendix N), to determine if they met the inclusion criteria, and a provisional diagnosis of PTSD was made using the PCL-5 (Weathers et al., 2013). The RAs, who were blind to the treatment, conducted assessments at baseline, post-intervention, and at three-month follow-up. The PCL-5, which is a self-report measure, was completed during the intervention phase by each participant before every treatment session.
6.9 Primary outcome measures

6.9.1 Posttraumatic Symptom Scale Interview – DSM5

The PSSI-5 (Foa et al., 2015) was designed as a flexible semi-structured interview to make a diagnosis of PTSD and to estimate the severity of the symptoms. The PSSI-5 has good internal consistency (alpha coefficient =.89) and test–retest reliability (r .87), as well as excellent interrater reliability for the total severity score (intra-class correlation .98) and interrater agreement for PTSD diagnosis (.84).

6.9.2 PTSD Checklist for DSM 5

The PCL-5 (Weathers et al., 2013) is a 20-item self-report measure that assesses the DSM-5 symptoms of PTSD. The PCL-5 has a variety of purposes, including: (a) Monitoring symptom change during and after treatment, (b) Screening individuals for PTSD, and (c) Making a provisional PTSD diagnosis. The PCL-5 test scores demonstrate good internal consistency (α = .96), test-retest reliability (r = .84), and convergent and discriminant validity (Bovin et al., 2015).

6.10 Secondary outcome measures

6.10.1 Beck Depression Inventory-II

The Beck Depression Inventory-II (BDI-II) (Beck, Steer, & Brown, 1996) has been found to be a reliable measure of depressive symptoms in a South African context (Makhubela & Mashigoane, 2016). The BDI-II is a 21-item self-report measure that assesses the severity of depression in adults and adolescents with scores ranging from 0 to 63. The reliability of the BDI-II is r = 0.71, the test-retest reliability is r = 0.93, and has an internal consistency of α=.91 (Beck et al., 1996). The BDI-II has also been validated and translated into isiXhosa to enhance the implementation of the BDI-II in a South African context.
6.10.2 Beck Anxiety Inventory

The Beck Anxiety Inventory (BAI) (Beck & Steer, 1993; Beck, et al., 1988) is a 21-item inventory measure for trait anxiety which is psychometrically sound. The BAI is reported to have good internal consistency, test re-test reliability, and good concurrent and discriminatory validity (Beck et al., 1988). The internal consistency for the BAI ranges from .92 to .94 for adults and test-retest (one-week interval) reliability is .75 (Fydrich, Dowdall, & Chambles, 1992). The BAI has also been adapted and translated to be used in the South African context (Kagee, Coetzee, Saal, & Nel, 2015; Steele & Edwards, 2008).

6.11 Data points

The study had a total of four data points (see Figure 6.3). All eligible participants were screened to assess his or her eligibility to participate in the study. The screening interview consisted of providing each participant with information about the research study and the intervention. Prospective participants received an information sheet about the project and were explicitly informed about the inclusion and exclusion criteria. Participants were asked specific questions based on the inclusion and exclusion criteria to ascertain his or her eligibility. For example, participants were asked if they had either witnessed or directly experienced a traumatic event in their lifetime. If they answered yes, participants were asked to complete a PCL-5 assessment measure to ascertain a positive PTSD diagnosis. The cut-off score is a total score of 33, which is indicative of PTSD (Blevins et al., 2015). At the end of the assessment, participants were informed of their inclusion in the study. Participants were informed of the baseline assessment and when they were scheduled to attend.
6.11.1 Time 1: Baseline assessment

Clients attended a baseline assessment at a scheduled date and time after the screening meeting. The baseline assessment consisted of the PSSI-5, BDI-II and BAI. The assessment measures were administered by an independent RA during the baseline, post-intervention, and three-month follow-up sessions. In addition to a retrospective view of the participant’s functioning, the data collected at Time 1 provided a baseline profile of the participant’s psychological functioning before the intervention started. Ensuring a baseline serves as a key marker for when any change is observed before the treatment is introduced. Clients were then
contacted by the PI via email or telephone to set up a date and time for the first session of the intervention, which was on average a week after the baseline assessment.

6.11.2 Time 2: Intervention phase

The second data point was during the intervention phase. Participants completed the PCL-5 before every session to monitor symptoms of traumatic stress during the intervention phase. The self-report measure was completed with the assistance of the PI. For example, clients at times did not understand certain questions or how to report the symptoms. The monitoring of trauma symptoms gave an accurate individualised observation of any changes during treatment and not merely baseline, post-intervention, and three-month follow-up.

6.11.3 Time 3: Post-intervention

All participants were re-assessed using PSSI-5, BDI-II and BAI at the end of the intervention phase. Clients had the option of attending assessment on the same day as the last intervention session or on an alternative day. A RA conducted the assessment, and informed participants that they would be contacted again in three months for a follow-up assessment. Participants were advised that the three-month waiting period was to ascertain if the treatment gains would be maintained.

6.11.4 Time 4: Three-month follow-up

Participants were also followed-up after three months’ post intervention to be re-assessed using PSSI-5, BDI-II and BAI by an independent RA. The PI contacted participants to set up a meeting date and time. If participants were not able to be assessed in person, clients were contacted via telephone to complete the PCL-5. Two participants were screened via telephone due to logistical difficulties which resulted in them being unable to meet in
person. In addition, participants reported they had not received or entered any other form of psychotherapy or pharmacotherapy during the three-month period. Detailed discussion of participant functioning during the three-month period is provided in Chapter 7 and Chapter 8.

6.12 Intervention

6.12.1 Prolonged exposure therapy

The brief PE intervention was administered by the PI of the study (DB). I am a registered clinical psychologist (registration number PS0130860) with the Health Professions Council of South Africa (HPCSA) and had been trained, during my graduate training in clinical psychology at Stellenbosch University, to administer an abbreviated version of PE in 2014 by Professor S. A. Kagee (AK). I also completed additional training in PE with Dr Edna B. Foa and Dr Sandy Capaldi in a 4-day intensive workshop in prolonged exposure therapy at the University of Pennsylvania (4 – 7 May 2020).

6.12.2 PE Adaptation

Adapted versions of PE have been used in different studies to ascertain preliminary effectiveness. For example, PE combined with SIT (Foa, Dancu et al., 1999), PE with or without cognitive restructuring (Foa et al., 2005), the use of 60-minute exposure sessions compared to 90-minute exposure sessions (Nacasch et al., 2015), and massed-PE (10 sessions over two weeks) have been found to be non-inferior to spaced-PE (10 sessions over eight weeks) (Foa et al., 2018). Rauch, Cigrang, Austern, and Evans (2017) have also assessed the feasibility of a brief four session PE intervention in primary care facilities (see Cigrang et al., 2017). Research on the various adaptations of PE has enhanced literature on the effective treatment of PTSD in various settings (Pomerantz, 2017). The brief PE version used in the
The presented study consisted of six sessions: psychoeducation, calm breathing training, in vivo homework exposure and imaginal exposure, and emotional processing.

Wiltsey-Stirman, Baumann, and Miller (2019) suggest that researchers should state whether modifications were planned or unplanned, and how it impacted the fidelity and provide a rationale for the modifications. An abbreviated version of PE was chosen based on the current project being a pilot and feasibility study aimed at accruing preliminary data on the effectiveness and acceptability of PE in LMICs with limited resources.

In the present study it was important to maintain the core procedures of PE (i.e., imaginal exposure and in vivo exposure). Adaptations in the brief PE intervention, compared to the standard version (Foa & Rothbaum, 1998; Foa et al., 2007; Foa et al., 2019), is that clients in the study only had six sessions in total, clients were not required to listen to audio-taped sessions outside of therapy due to resource constraints (see Willis, Perle, & Schnur, 2015), and SUD during treatment were supplemented by the PCL-5 and clinical observation by the PI throughout treatment. Yet, in vivo homework activities were included throughout the intervention. The major components of PE were maintained and implemented; therefore, the modification of PE in the study is considered to be fidelity-consistent (see Wiltsey-Stirman et al., 2015).

Prolonged exposure has a minimum length of 8–15 sessions, yet less than 10% of PTSD patients complete eight sessions of trauma-focused therapy (Mott et al., 2014; Shiner, Leonard Westgate, Harik, Watts, & Schnurr, 2017; Tuerk et al., 2013). Similar to Rauch (2017), the intervention only consisted of six sessions and session length was only 60 minutes to accrue preliminary data on the effectiveness of a brief PE treatment for PTSD at a primary healthcare level.
6.13 Brief PE overview

6.13.1 Session 1

The first session was used to orientate the participants to the goals of PE. The treatment orientation allowed me to provide a rationale for the procedures (i.e., in vivo and imaginal exposure) used in the treatment, and to answer any questions and concerns. I advised the client about the nature of the treatment, that it can be distressing at times. Informing participants about the nature of the treatment allowed for an open and honest discussion about expectations and how to adequately support the client. The open conversation also allowed the demonstration of skills such as genuineness and facilitating rapport building. I collected information about the traumatic event and concluded the session with calm breathing exercises. The session ended by encouraging the participants to practice calm breathing at home before the second session.

6.13.2 Session 2

At the start of the session, I asked about calm breathing exercises and if any difficulties were experienced. The session focused on psychoeducation/common reactions to traumatic events. I facilitated the discussion of common reactions in two ways. First, the client was asked to describe their lived experiences post-assault. Second, I used the information reported by the client to link it to common reactions of trauma. The matching of the client’s experiences and common reactions enabled the client to better understand the diagnostic construct of PTSD.

The latter part of the session focused on explaining the rationale of in vivo exposure and creating a list of possible items or activities to use for the in vivo exposure. Participants were asked to estimate levels of distress and choose an object or activity that would be tolerable but also allow for adequate activation of the fear structure during in vivo exposure.
Participants were provided with a rationale for the activity and told that in vivo activities are always done in a safe and controlled environment. In vivo exercises are encouraged throughout the six-week programme. At the end of the session participants were asked to continue with calm breathing and to complete the in vivo activity before the following session.

6.13.3 Sessions 3–6

The last three sessions include imaginal exposure, which is the recounting of the traumatic event. Participants were given a thorough rationale for why and how imaginal exposure enables emotional processing of the fear structure. During the imaginal exposure, recounting of the event was repeated several times. After recounting, emotional processing of any relevant emotions and cognitions occurred. Imaginal exposure is the major focus of treatment until the last session. The last session includes a brief recounting and reflecting on the treatment process (see Foa et al., 2019). The intervention process is discussed in Chapter 8 of the study.

6.14 Treatment fidelity

Treatment fidelity is an integral component of reliable and credible intervention research (Foa & Meadows, 1997; Kratochwill & Levin, 2014). Kendall and Beidas (2007) define treatment fidelity as the extent to which the prescribed treatment (prolonged exposure) was administered or delivered to the actual client, in other words, was the stated treatment implemented.

In the present study, all treatment sessions were video recorded at the respective research sites. Treatment sessions were stored on an external hard drive and uploaded to a password protected Dropbox account owned by DB. It was only me in the recording frame of
the camera and not the client. This was done for treatment fidelity purposes and allayed any anxiety of participants regarding being on camera during treatment.

Independent assessors attended a one-day training and orientation on how to use the fidelity rating protocol. The assessors were graduate students in psychology with an honour’s degree and/or a master’s degree in psychology. The assessors did not have a personal pre-existing relationship with DB (interventionist) to avoid any biases or conflict of interest. The assessors scored the videos after the intervention phase was completed by all clients. A fidelity rating manual for PE was requested by the PI from Professor S. Capaldi from the Center for the Treatment and Study of Anxiety (CTSA) at the University of Pennsylvania in Philadelphia, USA. The fidelity manual was slightly modified to match the abbreviated version of the PE programme (see Appendix P). The results of the treatment fidelity are reported in Chapter 7.

6.15 Data analysis

The use of visual inspection in SCED is a longstanding method of analysing single case data (Barlow & Hersen, 1984; Kazdin, 2019; Kratochwill & Levin, 2010; Lane & Gast, 2014). In the current study, the use of visual inspection and statistical analysis was used to analyse the data of the intervention phase.

6.16 Chapter summary

The chapter presented an overview of single case experimental design and procedure of the intervention phase. The study focussed on the implementation of PE for the treatment of PTSD in a South African context, the use of a single case experimental design allowed for a more idiographic observation of how PE performed as an empirically supported treatment for PTSD.
Chapter 7

Phase 2: PE Intervention – Results

7.1 Introduction

This chapter presents the results of the brief PE intervention. First, using visual inspection, the results of each participant who completed treatment is presented. Second, the chapter describes factors related to participant dropout rates and the treatment fidelity. This is followed by the statistical analysis of the results as a supplementary to the visual inspection. Lastly, the chapter concludes with a summary of the intervention results. A discussion of the results is presented in Chapter 8.

7.2 Results

An idiographic case description is used to contextualise each participant. Barlow and Nock (2009) advocate for an idiographic approach to scientific undertakings to explore and ascertain causal relations among variables. The case descriptions provide a case summary of the basic demographics, a description of the index trauma and of the social context. In the present study, each participant who completed the baseline assessment and received at least one session were included in the reporting of the intervention. Participant dropouts are discussed later in the chapter.

Table 7.1 reports on the sample characteristics. Out of the 12 participants, 100% were female (three males were screened but did not meet a diagnosis for PTSD or did not return to start treatment), 25% were Coloured, 58, 3% were Black African, and 16, 7% were White with a mean age of 26 years, and a standard deviation of 9 years. Pseudonyms are used to protect the identities of all participants.
Table 7.1

*Sample Characteristics of Trauma Survivors*

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Age</th>
<th>Race*</th>
<th>Marital Status</th>
<th>Nationality</th>
<th>Trauma Type</th>
<th>Trauma History</th>
<th>Education</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
<td>F</td>
<td>48</td>
<td>Coloured</td>
<td>Married</td>
<td>RSA</td>
<td>Witnessed injury, death, dead body</td>
<td>Multiple</td>
<td>High School</td>
<td>Formal employment</td>
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<tr>
<td>Ninah</td>
<td>F</td>
<td>39</td>
<td>Black African</td>
<td>Married</td>
<td>DRC</td>
<td>Mugged &amp; physically assaulted</td>
<td>Multiple</td>
<td>High School</td>
<td>Informal employment</td>
</tr>
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<td>Thandi</td>
<td>F</td>
<td>25</td>
<td>Black African</td>
<td>Single</td>
<td>RSA</td>
<td>Physically assaulted</td>
<td>Multiple</td>
<td>University</td>
<td>Full-time student</td>
</tr>
<tr>
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<td>Married</td>
<td>DRC</td>
<td>Raped</td>
<td>Multiple</td>
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<td>Farren</td>
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<td>Relationship</td>
<td>RSA</td>
<td>Raped</td>
<td>Multiple</td>
<td>University</td>
<td>Full-time student</td>
</tr>
<tr>
<td>Xolela</td>
<td>F</td>
<td>20</td>
<td>Black African</td>
<td>Single</td>
<td>RSA</td>
<td>Mugged</td>
<td>Single</td>
<td>University</td>
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</tr>
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<td>Olivia</td>
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<td>Coloured</td>
<td>Single</td>
<td>RSA</td>
<td>Raped</td>
<td>Single</td>
<td>University</td>
<td>Full-time student</td>
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<tr>
<td>Tumi</td>
<td>F</td>
<td>21</td>
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<td>RSA</td>
<td>Sexually assaulted</td>
<td>Multiple</td>
<td>University</td>
<td>Full-time student</td>
</tr>
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<td>Nadine</td>
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<td>White</td>
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<td>RSA</td>
<td>Physically assaulted</td>
<td>Single</td>
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<td>Tamara</td>
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<td>Black African</td>
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<td>Raped</td>
<td>Multiple</td>
<td>University</td>
<td>Full-time student</td>
</tr>
</tbody>
</table>

*m age 26
SD age 9

Commend

Note. *The use of racial categories is not endorsed in this present study, but I am aware that this may be how participants self-identify and construct their social world.
In Figure 7.1, the index trauma reported during baseline assessments ranged from physical assault to mugging, and rape and sexual assault were the most (50%) reported index trauma types in the sample. In the total sample participating in treatment, more than 60% reported a history of multiple traumas. All the participants had at least a completed high school qualification with the majority enrolled at tertiary level education (75%).

![Pie chart showing frequency of index traumas]

*Figure 7.1. Frequency of index traumas.*

### 7.3 Visual inspection

Visual inspection is a systematic approach to analysing and understanding the data of each participant (Lane & Gast, 2014). A benefit of visual inspection, especially in a clinical setting, is to ascertain good end-state functioning of participants at the end of treatment based on the graphical representation of clinical measures (Lane & Gast, 2014). Visual inspection assesses three key features in the data, namely, the level or mean performance in a condition (i.e., baseline or intervention), the trend of the data or the direction in which the data is progressing, which can either increase or decrease, and the variability or stability of the data (Kratochwill & Levin, 2014; Lane & Gast, 2014).
In addition to these core analytical features, analysis of single case data also examines within-condition data and between-condition data (Lane & Gast, 2014). Within-condition analysis is an examination of the data in each phase (i.e., intervention phase) (Lane & Gast, 2014). For example, the application of level, trend, and stability will also be observed within specific conditions such as the intervention phase. Due to the limited observations in baseline, post-intervention and three-month follow-up, within-condition was mainly focused on the intervention phase where multiple observations were made using the PCL-5.

As described in Chapter 6, participants also serve as their own control and provide an opportunity for replication of the treatment effect within and across cases (Lane & Gast, 2014). For example, when a single participant exhibits symptom reduction across various measurements or observation points, it can be argued that a positive downward trend is observed. This trend is supported and strengthened when similar reductions are observed across participants.

The following section presents an idiographic presentation for all participants (n = 9) who completed the intervention, with an addition discussion of the dropouts. A brief case description is provided for each case and a reporting of the relevant results pertaining to each outcome.

7.3.1 Case 1 – Sam

Sam, a 48-year-old female from the Cape Flats in Cape Town, was referred for treatment after witnessing a gang-related killing of an adolescent male in front of her house. Sam was married with two school-going children and was informally employed at the time of treatment. Sam lived in a resource-constrained area with pervasive levels of gang violence and low levels of employment and limited social services such as policing. The index trauma occurred seven months prior to treatment. At intake, she met the criteria for PTSD (PSSI-5 =
55, cut-off is 23), with symptoms of severe depression (BDI-II = 42) and mild anxiety (BAI = 12).

Sam reported that she knew the young male who was shot and killed in front of her house. She reported feeling guilty and ashamed for not having had the courage to prevent the shooting. Sam also reported feelings of fear and was afraid to leave her house. She avoided talking about the event and could not walk pass or look at the location of the killing (her front gate). Sam reported that she would be reminded of the event when she heard loud noises or gunfire in her neighbourhood. She also reported to have diminished concentration and sleep. In addition, Sam reported that she had witnessed the shooting and killing of her sister 12 years prior to the current index trauma. She had not previously sought out psychological intervention. During treatment, Sam was co-operative and tearful when she had to engage in imaginal exposure but was initially hesitant to engage in in vivo exposure. Figures 7.2 to 7.5 illustrate Sam’s treatment outcome for PTSD, Depression and Anxiety.

![Figure 7.2. Sam’s PSSI-5 scores.](image)
Regarding PTSD, Sam had reduced symptoms of PTSD at post-assessment and a further reduction in symptoms at three-month follow-up. For depression, Sam reported reduced symptoms of depression at post- and three-month follow-up. Similar results were reported for anxiety at post- and three-month follow-up. However, at three-month follow-up Sam had a slight increase in PTSD, depression and anxiety symptoms but remained sub-clinical in her overall functioning. Overall, Sam’s scores on all three measures depict a downward trend with slight increases at three month-follow, but this remained sub-clinical.
Figure 7.5 depicts Sam’s trauma symptoms during the intervention, which were measured by the PCL-5.

At session 1 and 2, there is a clear downward trend in trauma symptoms with minimal variability. However, at session 3 there appears to be a slight increase in distress but this started to decrease again at session 4 and continues until session 6. At the end of treatment Sam had a negative diagnosis of PTSD. However, her scores throughout the intervention illustrates some variation but continued to have a steady downward trend. The slight increase in distress in session 3 can be attributed to imaginal and in vivo exposure, which Sam found distressing at first. Yet she soon appeared to tolerate the distress of engaging in exposure. Overall, Sam appeared to have reduced symptoms for PTSD, depression, and anxiety at the end of treatment and remained sub-clinical at three-month follow-up.

7.3.2 Case 2 – Ninah

Ninah, a 39-year-old female from the Democratic Republic of Congo (DRC) reported a history of multiple traumas. Her traumas were related to exposure to civil war in the DRC and physical violence (mugging) in South Africa as an asylum-seeker. Ninah and her family
had been living in the Cape Town area since 2007. Ninah was not formally employed at the time of treatment and reported to have financial difficulties as an asylum-seeker in South Africa. Three months prior to entering treatment, Ninah reported that whilst walking to the local shop, she and her husband were mugged at knifepoint by a group of younger-aged males. The perpetrators held her husband with a knife against his neck.

According to Ninah, the robbery occurred during the day in a busy area of her neighbourhood. At intake, she met the criteria for PTSD (PSSI = 61, cut-off is 23), with moderate depression (26), and anxiety (23). Ninah reported experiencing heart palpitations and feeling worried at home. She was afraid to leave her house. She was fearful of unfamiliar persons and had recurring nightmares soon after the attack. During the treatment phase, Ninah reported two additional incidences of potential mugging / physical violence, from which she managed to escape. Moreover, Ninah also reported that her status as an asylum-seeker in South Africa resulted in intermittent xenophobic threats of violence during the time of treatment. During treatment, Ninah reported feeling depressed and hopeless due to her status as an asylum-seeker in South Africa and reported that her native country had failed her. She was committed to treatment despite the fact of persistent community and xenophobic threats of violence.

At intake, Ninah had a severe symptom presentation of PTSD. Ninah had about a 50% reduction in her trauma symptoms from baseline to post-intervention, yet she still had a positive diagnosis for PTSD. However, at three-month follow-up Ninah had further reduced symptoms of PTSD. Her scores on the BDI-II also showed a downward trend, and the same downward trend was observed on the BAI scores. Yet her depressive symptoms remained moderate at three-month follow-up. Figures 7.6 – 7.9 illustrate how Ninah performed across all three outcomes and the intervention phase.
Figure 7.6. Ninah’s PSSI-5 scores.

Figure 7.7. Ninah’s BDI-II baseline, post, 3-m follow-up.

Figure 7.8. Ninah’s BAI scores.
As seen with Sam, Ninah had a moderate downward trend in PTSD symptoms during the treatment phase. However, Ninah’s symptom reduction was less beneficial as she still had a diagnosis of PTSD at the end of treatment. The PCL-5 scores also indicate a clear increase in distress at session 3. This is reflective of the re-victimisation Ninah experienced during the treatment phase. It could be argued that due to Ninah’s experience of victimisation, she had a slower process of ameliorating her symptoms of trauma from baseline to post-intervention, but that she eventually (at three-month follow-up) had a negative diagnosis of PTSD.

7.3.3 Case 3 – Thandi

Thandi, a 25-year-old female university student, entered treatment after she was physically assaulted with a knife. Thandi was a third-year pharmacy student and lived alone in university residence. She reported a history of sexual abuse from age five to 11 years. She was sexually assaulted by an older female family friend and she was raped at age 22 by a
male friend at her house. Four months prior to treatment, Thandi reported that she was stabbed in the abdomen by a younger-aged male after an attempted mugging.

She described that the attack happened whilst she was preparing for an exam in the local park nearby the university campus. According to Thandi, she had an apple for lunch and used a steak knife to peel the apple. Moments before the attack, she was talking to a friend over the phone. Then, a younger-aged male approached her and asked for her cellular phone. According to Thandi, she cannot fully recall the sequence of events, but soon after the perpetrator asked for her phone, she realised that she had been stabbed with her own knife in the abdomen. After the attacker fled the scene, she walked and crawled out of the park to find help whilst the knife was still stuck in her abdomen. Eventually, she was assisted by two men who took her to the local hospital for emergency medical care.

At intake, Thandi reported having recurring thoughts about the stabbing, and that she felt that the knife was still stuck in her abdomen. She avoided eating apples, wearing the clothing she wore on the day of the attack and using steak knives. Her friends and family ridiculed and blamed her for getting stabbed with her own knife. As a result, she felt unsupported by her family and isolated herself. Thandi also reported believing that bad experiences seemed to always happen to her. As a result, Thandi reported low self-worth. She had difficulty sleeping and felt depressed and fearful. She met the criteria for PTSD (PSSI = 34), with severe symptoms of depression (BDI-II = 33) and moderate anxiety (BAI = 28). During treatment, Thandi engaged well and was co-operative. Thandi managed to complete treatment and was followed up at three-months.

For PTSD, depression and anxiety, there is an observable downward trend in her trauma symptoms. At post-intervention assessment for PTSD, Thandi had a negative diagnosis for PTSD and this was maintained with a further reduction in PTSD symptoms at three-month follow-up. On the BDI-II, a steady reduction in symptoms was also observed at
post and at three-month follow-up. Similar observations were made on her BAI scores for anxiety. Thandi’s lowest scores were on the PSSI-5 and the BAI, and even though her BDI scores were reduced, she still presented with mild symptoms of depression on the BDI-II. Her residual symptoms of depression might be attributed to Thandi’s negative cognitions regarding her self-worth and negative cognitions about herself in the world. Figures 7.10 – 7.13 illustrate Thandi’s scores across all three outcomes and the intervention phase.

**Figure 7.10.** Thandi’s PSSI-5 scores.

**Figure 7.11.** Thandi’s BDI-II scores.
Figure 7.12. Thandi’s BAI score.

Figure 7.13. Thandi’s during treatment PCL-5 scores.

In Figure 7.13, there is a clear downward trend in PTSD symptoms during the intervention with some variation in the middle of the intervention. Overall, Thandi had a steady decrease in symptomology during the intervention, but reported an increase in distress at sessions 3 and 4. At session 3, Thandi had already started with in vivo exposure which could have resulted in the slight increase in session 3, but in session 4, Thandi reported that she had visited the location of the trauma. This resulted in her feeling overwhelmed and
distressed. After processing her decision to engage in such an activity without the knowledge or prior preparation in treatment, Thandi realised that she had to be systematic in her treatment and exposure to fearful stimuli. Hereafter, we can observe a clear reduction in PTSD symptoms until the end of treatment.

7.3.4 Case 4 – Farren

Farren, a 20-year-old female from Cape Town, lived and studied in the EC. At age five, Farren reported to have been raped and sexually assaulted by one of her female cousins. According to Farren, as a child she was asked by a Social Worker, using a doll, to indicate where someone had physically touched her. Farren reported that she did not understand why she had been asked to see a Social Worker, as she was unaware that she was the victim of sexual assault. At age 12, her mother casually said to her, “you were raped as a child” (Recording, session 1, time: 14 min. 13 seconds). Since then, according to Farren, she recalled what had happened but still could not recall other details as she believes that she dissociated during the traumatic events.

As an adolescent and a young adult, Farren reported that throughout her life she isolated herself and found it difficult to make new friends or to engage in romantic relationships. She has found it difficult to trust people and has always been watchful of her surroundings. She found it difficult that she could not fully recall the details of being raped but had known enough to know that she was sexually violated as a child. Farren met the criteria for PTSD with a score of 43 on the PSSI-5 and had minimal to mild symptoms of depression on the BDI-II (13) and a moderate score of 18 on the BAI. Farren completed treatment and was followed up at three months after treatment.

For PTSD, a downward trend is observed in Farren’s scores on the PSSI-5. From baseline to post-intervention assessment, Farren still had a positive diagnosis for PTSD, but
at three-month follow-up she had a further reduction in symptomology which resulted in a negative PTSD diagnosis. For depression and anxiety, Farren’s scores on the BDI-II and the BAI also appeared to have a steady decrease in severity until three-month follow-up. Figures 7.14 – 7.17 illustrate how Farren performed across all three outcomes and the intervention phase.

**Figure 7.14.** Farren PSSI-5 total scores.

**Figure 7.15.** Farren’s BDI-II scores.
Figure 7.16. Farren’s BAI scores.

Figure 7.17. Farren’s during treatment PCL-5 scores.

Farren’s PTSD symptoms during treatment appeared to have had a sudden decrease and remained stable below clinical level. Yet near the end of treatment, at session 5 and 6, Farren’s scores on the PCL-5 appeared to have increased which resulted in a positive diagnosis for PTSD. During treatment, Farren found the imaginal exposure overwhelming as she had never talked about her traumatic experiences before. She also felt overwhelmed as she had to persistently recall what had happened to her as a child. After some reflective and
supportive discussion about her over-engagement during imaginal exposure, we decided that she would write down her recounting of the index trauma and read the account during treatment.

7.3.5 Case 5 – Olivia

Olivia was a 21-year-old female from Pretoria. Olivia sought treatment eight months after she was raped by a friend at university. At the time of treatment, Olivia lived in university residence and was not in a romantic relationship. On the night of the rape, Olivia reported that her friend invited her to his residence to watch movies. Whilst watching movies, she realised that her friend was making sexual advances which she declined. Olivia admitted that she had liked her friend and had casually kissed him before but was not interested or willing to have sexual intercourse. She reported that he forced himself on her and raped her. At the time of the rape and shortly afterwards, Olivia reported having felt confused and did not want to accept what had happened to her.

According to Olivia, the friendship deteriorated, and they did not have any contact. She did not report the rape to the police as she did not want people to know that she had been raped. At intake, Olivia reported elevated symptoms of avoidance, arousal and reactivity, and struggled to concentrate on her studies. She had met the criteria for PTSD on the PSSI-5 (54) and had severe symptoms of depression on the BDI-II (37) and BAI (31).

Olivia’s scores on the PSSI-5 for PTSD showed a decrease in symptomology from baseline to post. At post-intervention, Olivia reported to have had a negative diagnosis of PTSD. However, at three-month follow-up, Olivia had an observable upward trend in her trauma symptoms. Similar downward trends from baseline to post with an increase at three-month follow-up were observed on the BDI-II. The BAI depicted a consistent downward
trend in symptomology. Figures 7.21 – 7.24 illustrate the outcomes for PTSD, depression, and anxiety, and the intervention phase.

**Figure 7.18.** Olivia PSSI-5 scores.

**Figure 7.19.** Olivia’s BDI-II scores.
Olivia’s PCL-5 scores appeared to vary across all sessions. From session 1, there was a sharp decline in PTSD symptoms. At session 3, which is after the first in vivo activity, Olivia appeared to have a steady increase in symptoms during the exposure phase of treatment. At session 6, Olivia reported to have reduced symptoms to a sub-clinical level. During treatment, Olivia was mostly under-engaged and did not appear to activate her trauma memory whilst recounting her experience in a descriptive manner. She also struggled with feelings of ambivalence towards her friend who raped her. Olivia completed treatment and
was followed up at three-month post-intervention. At the follow-up, Olivia reported having been distressed due to reports of rape incidences at the university at which she was studying at the time. She reported to the assessor that the reported incidences of rape on campus were distressing for her.

7.3.6 Case 6 – Tumi

Tumi, a 21-year-old female from Johannesburg, was a first year BA general student. Tumi had a history of multiple traumas; at age seven she was sexually assaulted, at age nine she witnessed her father being shot, at age 14 she was physically attacked with a knife, and at age 17 her grandmother suddenly passed away in a motor vehicle accident. Furthermore, she had a strenuous relationship with both her mother and father.

More than a month prior to reporting to the counselling centre, Tumi had been followed and stalked by an unfamiliar male in town. She reported that a middle-aged male had followed her and exposed his genitalia to her in a public space. As a result, Tumi was fearful of going outside as she believed the stalker would attempt to follow her again and possibly hurt or rape her. At intake, Tumi had met the criteria for PTSD on the PSSI-5 (43) and had severe depressive symptoms (BDI-II = 42) and anxiety (BAI = 40).

Tumi’s symptoms of PTSD had remained the same with a slight increase at the end of treatment. Yet at three-month follow-up, Tumi had reduced symptoms of PTSD on the PSSI-5 which resulted in a negative diagnosis of PTSD. Tumi had similar increased scores on the BAI, even though her anxiety had reduced, it remained at a clinically significant level of moderate distress. The BDI-II depicted a steady downward decrease in symptoms of depression from baseline, post and three-month follow-up. Figures 7.22 – 7.25 illustrate the outcomes for PTSD, depression, and anxiety, and the intervention phase.
Figure 7.22. Tumi’s PSSI-5 scores.

Figure 7.23. Tumi’s BDI-II scores.

Figure 7.24 Tumi’s BAI scores.
**Figure 7.25.** Tumi’s during treatment PCL-5 scores.

Based on her PCL-5 scores, Tumi had a general downward trend in symptoms with a slight increase during session 5. Overall, during treatment Tumi presented with elevated symptoms of depression and dissociation during treatment. She dissociated during treatment and struggled to remain engaged in the process of treatment. In addition to the index trauma, Tumi’s symptoms of depression and hopelessness compounded her distress during treatment.

### 7.3.7 Case 7 – Bongi

Bongi, a 20-year-old female from Butterworth in the EC reported to have been sexually assaulted whilst she was home during the university holiday. Bongi reported that whilst she was out with her friends at a night club, she was kidnapped by three unknown males. The males took her to a nearby bush area, restrained her, and started to undress her. Bongi reported to have lost consciousness and was distressed about not knowing what else did or could have happened to her during the time of the assault. She reported that her friends realised she was missing, they found her, and managed to deter the attackers. At intake, she
met the criteria for PTSD on the PSSI (54) and had moderate symptoms of depression and anxiety on the BDI-II (22) and BAI (26).

For PTSD, Bongi’s scores on the PSSI-5 had a steady downward trend. At post-intervention assessment, Bongi had a negative diagnosis of PTSD which was maintained at three-month follow-up with further reduced symptoms. Similar positive trends were observed on the BDI-II and the BAI. For depression, Bongi had minimal symptoms of depression at post and three-month follow-up. Similar results were observed on the BAI. Overall, on all three measures, Bongi had a negative diagnosis for PTSD, depression, and anxiety. Figures 7.26 – 7.28 illustrate the outcomes for PTSD, depression, and anxiety. Figure 7.29 illustrates how Bongi’s symptoms of PTSD were measured during treatment.

![Figure 7.26. Bongi PSSI-5 scores.](image-url)
Figure 7.27. Bongi’s BDI-II scores.

Figure 7.28. Bongi’s BAI scores.
Based on the PCL-5 scores across all six sessions, there was a noticeable downward trend in symptom reduction. Only in session 5 is there an increase in distress, but this soon dissipated in the last session. During treatment, Bongi engaged in all activities, but struggled on a cognitive level to integrate the sexual assault with her perception of herself. Bongi admitted during treatment that she found exposure treatment challenging but that she was motivated enough to complete treatment.

7.3.8 Case 8 – Annelise

Annelise, a 27-year-old female, had a prolonged history of early childhood neglect, emotional and physical abuse. As a child, she was exposed to domestic violence between her parents. At age 16 she witnessed her mother being shot and killed during a break-in at their house. At age 22, she reported to have been date-raped by one of her work colleagues. More recently, she worked abroad for a few years and was stalked by an unfamiliar male for about a year. As a result, she returned to South Africa, she enrolled at university and had difficulty integrating into the university context due to her past traumatic experiences.
At intake, Annelise found it difficult to identify a primary index trauma in her life. She reported that her psychological trauma occurred over such an extended time that it was difficult to focus on a single trauma memory. Annelise met the criteria for PTSD (PSSI - 42) and had severe depression (BDI-II - 33) but had a minimal score for anxiety (BAI - 2). Due to her protracted experiences of trauma, Annelise was distrusting towards others and purposefully avoided any contact with her father, yet she talked about her relationship with her father for most of the treatment.

Based on the PSSI-5 scores, Annelise had a stable downward trend in symptom reduction for PTSD. For example, at post-intervention she had a negative diagnosis for PTSD which was maintained at three-month follow-up. Similar positive results were found on the BDI-II and the BAI. For depression, Annelise had reduced symptoms from moderate to mild. The most improvement was observed on the BAI. Annelise had minimal symptoms of anxiety at post and three-month follow-up. Figures 7.30 – 7.32 illustrate the outcomes for PTSD, depression, and anxiety. Figure 7.33 illustrates how Annelise responded during treatment.

![Figure 7.30. Annelise’s PSSI-5 score.](image-url)
Figure 7.31. Annelise’s BDI-II scores.

Figure 7.32. Annelise’s BAI scores.
Based on the PCL-5 scores, Annelise appeared to have little to no reduction in symptoms for the first two sessions. At session 3, there was an increase in symptoms with an eventual decrease in session 4 and 5. The last session of treatment observed an increase in symptoms of PTSD. Overall, Annelise’s symptom presentation during treatment appeared to be varied and mostly unchanged, resulting in a positive diagnosis at the last session on the PCL-5.

7.3.9 Case 9 – Tamara

Tamara, a 20-year-old female from Kwa-Zulu Natal, was a full-time drama student. Tamara reported that she was raped at age 15 and age 18. Tamara had a history of depression and difficulties with low self-esteem as an adolescent. She described her parents as strict and emotionally unavailable and said that she had not told them about her sexual trauma.

Regarding both rape incidences, she described how she did not know how to stop the perpetrators and realised that she was coerced into fornicating with persons she did not know – without her consent. She described herself as a submissive person with low confidence and did not know how to defend herself.
At intake, she reported isolating herself and avoiding people and places on the university campus. Her baseline scores met the criteria for PTSD (PSSI - 38), severe depressive symptoms (BDI-II - 43) and anxiety (BAI - 34). Tamara also reported having been on psychotropic medication during treatment and did not require any medication adjustments during treatment. She was followed up at three-month post-intervention.

Figures 7.34 to 7.36 depict Tamara’s scores for PTSD, depression, and anxiety. For PTSD, Tamara’s scores had been reduced at post-assessment, but she still had a positive diagnosis for PTSD. At three-month follow-up, Tamara had increased symptoms of PTSD which was higher than her baseline score. For depression, Tamara’s symptoms remained severe from baseline, post and three-month follow-up. For anxiety, Tamara’s symptoms had also been reduced but remained within a moderate range compared to the initial severe range. Overall, Tamara remained symptomatic for PTSD, depression and anxiety. The only major reduction in symptoms were on the BAI.

![Figure 7.34. Tamara’s PSSI-5 scores.](image-url)
**Figure 7.35.** Tamara’s BDI-II scores.

**Figure 7.36.** Tamara’s BAI score.
In Figure 7.37, Tamara’s PTSD scores can be observed during treatment. Based on the PCL-5 scores, there appears to be a very slight downward trend in symptoms, and noticeable variation during treatment. Her symptoms remained at a severe level as she maintained a positive diagnosis for PTSD throughout the course of treatment.

In addition, Tamara reported avoiding thinking about her rape and it was difficult to allow herself to become emotional about her experiences. Tamara had a negative valence towards treatment and appeared to be evasive and avoidant during treatment. This required a great deal of processing. Overall, Tamara’s approach to treatment resulted in her under-engagement and severe avoidance. Tamara also reflected on her depressive and self-esteem difficulties and was unsure how she could manage and process all the psychological distress.

### 7.4 Across participant trends

In Figures 7.38 to 7.40, we can see the combined trends across the participants who completed the treatment. Tables 7.2 to 7.4 also present an overall presentation of all three outcomes.
Overall, there appears that most participants had a downward trend in PTSD symptom reduction from baseline to post and three-month follow-up. Based on the PSSI-5 scores at post-intervention, only 55% of the participants had a negative diagnosis, but at three-month follow-up, 78% of the participants had a negative PTSD diagnosis at the end of the study, which is indicative of a follow-through effect. Figure 7.38 also illustrates the replication of the treatment effect on the dependant variable.

Table 7.2

*PSSI-5 for PTSD*

<table>
<thead>
<tr>
<th>Time points</th>
<th>Ninah</th>
<th>Sam</th>
<th>Farren</th>
<th>Tumi</th>
<th>Olivia</th>
<th>Bongi</th>
<th>Thandi</th>
<th>Annelise</th>
<th>Tamara</th>
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<td>34</td>
<td>7</td>
<td>7</td>
<td>11</td>
<td>41</td>
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A similar downward trend in depression on the BDI-II can be observed in Figure 7.39 and Table 7.3. All participants (88%), except one, had mild to minimal symptoms of depression at the end of three-month follow-up. As with PTSD trends across participants, there appears to be a greater replication of downward trends in symptoms of depression.

![Figure 7.39. Combined BDI-II trends.](image)

### Table 7.3

**BDI-II Scores for Depression**

<table>
<thead>
<tr>
<th>Time points</th>
<th>Ninah</th>
<th>Sam</th>
<th>Farren</th>
<th>Tumi</th>
<th>Olivia</th>
<th>Bongi</th>
<th>Thandi</th>
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<th>Tamara</th>
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</tbody>
</table>

*Note. Score ranges: 0–13 Minimal, 14–19 = Mild, 20–28 = Moderate; 29–63 = Severe*
However, in Figure 7.40 and Table 7.4, symptoms of anxiety on the BAI appeared to be varied with no clear trend detected across participants. From post-assessment to three-month follow-up scores were varied from minimal to severe. It is not possible to observe a general trend given the amount of variability across participants. Although, in Table 7.4, just over 50% of the participants were in the minimal range at three-month follow-up, with the remaining in the moderate to severe range.

**Figure 7.40. Combined BAI score.**

**Table 7.4**

<table>
<thead>
<tr>
<th>Time points</th>
<th>Ninah</th>
<th>Sam</th>
<th>Farren</th>
<th>Tumi</th>
<th>Olivia</th>
<th>Bongi</th>
<th>Thandi</th>
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</tbody>
</table>

*Note. Score ranges: 0–7 Minimal; 8–15 = Mild; 16–25 = Moderate; 26–63 = Severe*
Based on the across participant trends, for PTSD and depression there is a clear downward trend and replication of the treatment effect, which is suggestive of good end-state functioning for most participants. Yet the variability on the BAI does not provide the same clarity, especially regarding replication of the treatment effect for symptoms of anxiety.

7.5 Dropouts

Psychotherapy treatment dropout rates have improved over the last few decades (Swift & Greenberg, 2012). In a meta-analysis and regression analysis, Swift and Greenberg (2012) found that in 669 psychotherapy studies with adults (n = 83,834), focused on mood and anxiety disorders, the mean weighted dropout was 19.7%, with a high rate of heterogeneity range of 0% – 74.23%. The authors concluded that even with the decrease in dropout rates over the last few decades, the non-completion of treatment is still dependent on a wide range of variables (Lewis et al., 2020; Swift & Greenberg, 2012).

Overall, treatment dropout negatively affects ascertaining treatment efficacy in research, and service utilisation in public health centres (Hundt et al., 2018; Swift & Greenberg, 2012). Therefore, it was necessary to describe dropout rates in the present study. Dropout in clinical research is defined as the premature termination of treatment after the completion of the first session, and before the reason (distress) which led the client to seek treatment has been ameliorated (Hundt et al., 2018; Swift & Greenberg, 2012).

On average, the dropout rates for the treatment of PTSD, using a trauma-focused treatment such as PE, have been found to range between 20% and 25% (Hundt et al., 2018). In the present study, in the total sample of participants (n = 12) who started treatment, only nine completed (75%), and three (25%) did not complete treatment. The variables which might have led to the dropout of these participants are discussed below.
7.5.1 Case 10 – Xolela

Xolela, a 20-year-old female law student from Johannesburg studied and lived in the EC. Xolela reported having been robbed at knifepoint by two unknown males. The mugging occurred four weeks before starting treatment. Xolela reported that she and a female friend walked home after studying on campus. Not too far from her flat, two men approached them and asked for their cellular phones. Xolela reported that the men intrusively body searched them, which made her feel uncomfortable and helpless. The perpetrators also told them that they knew where they lived. After the assault, Xolela was fearful and believed that the perpetrators would attempt to hurt her again. She reported the case to the police, but the police reported that they could not do very much to assist her.

At intake, Xolela had a total score of 55 on the PSSI-5, and moderate symptoms of depression on the BDI-II (28) and severe symptoms of anxiety on the BAI (44). During treatment, Xolela had to undergo a medical operation for appendicitis and only returned for one session after her surgery. Xolela was contacted to reschedule but did not respond. She completed four sessions before discontinuing treatment.

7.5.2 Case 11 – Gloria

Gloria, a 30-year-old Congolese female resided in the Cape Town area with her husband and two children. At the time of treatment, she was studying to complete a diploma in marketing. At intake, Gloria reported that at age 16 she was sexually assaulted by her uncle. Gloria reported that she was sent to stay with her uncle and aunt in France to attend school as she had limited education opportunities in the DRC. After the first assault, Gloria said that she struggled to cope and attempted suicide using polysubstance at age 16. She describes her time in France as a difficult period in her life. She returned to the DRC and never reported or talked about the sexual abuse to anyone, not even her husband.
At intake, Gloria had met the criteria for PTSD (56 on the PSSI-5) and had severe symptoms of depression and anxiety (BDI-II = 32; BAI = 35). Gloria reported that even though the trauma happened a long time ago, she was still traumatised. She had difficulty watching any violent or sexually explicit material (e.g., movies). She also found sexual intimacy with her husband to be difficult due to her traumatic experience. Early into treatment, Gloria reported having survived an attempted mugging during the treatment phase. Consequently, Gloria did not complete treatment as she feared for her safety.

7.5.3 Case 12 – Nadine

Nadine, a 20-year-old female from Cape Town, lived with her boyfriend in the EC. Nadine and her boyfriend were students and lived together in a student housing complex. She reported that they were attacked at home whilst robbers were attempting to rob their house. Nadine reported that she and her boyfriend had to physically fight and defend themselves against the attackers. Her boyfriend was stabbed in the arm and she had to accompany him to the local hospital. At intake, Nadine met the criteria for PTSD on the PSSI-5 (50) and severe anxiety on the BAI (30), but relatively minimal levels for depression on the BDI-II (13).

Soon after the first session, Nadine went back home to Cape Town for a brief holiday and upon her return to the EC she reported feeling better and disclosed that she had engaged in an alternative treatment (reflexology movement). Upon this news, we agreed that she could not continue in the research due to exclusion criteria but had the opportunity to engage alternative treatments. A brief termination session was conducted, and she completed the PCL-5 to confirm her psychological functioning. She declined to be referred to counselling as usual as she reported to feeling better. However, a few months later, Nadine emailed to ask about starting treatment again, to which I said yes, but she never responded again. Treatment was discontinued.
Factors attributing to dropout rates have been found to be heterogeneous ranging from setting, clients, and service providers (Swift & Greenberg, 2012). Dropout rate reasons in the present study ranged from (a) violation of treatment inclusion criteria, (b) living in an insecure setting, and (c) non-attendance.

7.6 PE fidelity ratings

Foa and Meadows (1997) recommended, among others, that treatment fidelity be an integral part of credible intervention research. Similarly, in single case research the measurement of adequate treatment implementation is imperative as the treatment effect of the IV (PE) on the dependent variable (PTSD) is measured over time (Horner, Carr, Halle, Mcgee, Odom, & Wolery, 2005).

In the present study, treatment fidelity across all 12 participants were found to be “good”. On average, 75% fidelity to the treatment manual was maintained by the therapist. As described in Chapter 6, treatment sessions were viewed and rated by independent RAs. Ratings were based on a fidelity checklist provided by the Centre for the Treatment and Study of Anxiety (see Appendix O). The fidelity protocol was slightly modified to match the brief PE intervention. The rating scale assessed the presence of a therapeutic element per session. The rating scale ranged from 0 = poor, 1 = barely adequate, 2 = good, and 3 = excellent. Based on the mode descriptive statistic, for session 1, the therapist obtained an excellent scoring. For sessions 2 to 6, the therapist obtained a scoring of good across all sessions. Therefore, across all sessions, fidelity to the treatment manual was rated as good. Good implementation of treatment strengthens the interval validity of the research findings. Table 7.5 presents the rating for each case per session.
Table 7.5

<table>
<thead>
<tr>
<th>Case</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4 or 5</th>
<th>Session 6</th>
<th>Adherence %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>Ninah</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>Thandi</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>Gloria</td>
<td>3</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>100</td>
</tr>
<tr>
<td>Farren</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>47</td>
</tr>
<tr>
<td>Xolela</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>*</td>
<td>83</td>
</tr>
<tr>
<td>Olivia</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>Tumi</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>Nadine</td>
<td>3</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>100</td>
</tr>
<tr>
<td>Bongi</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>73</td>
</tr>
<tr>
<td>Annelise</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Tamara</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>75%</strong></td>
</tr>
</tbody>
</table>

*Note. Rating = 0 = poor; 1 = barely adequate; 2 = good; 3 = excellent. * = dropout missing data.*

7.7 Statistical analysis

7.7.1 Mixed model ANOVA

In order to supplement and to offset some of the limitations of visual inspection, the use of a mixed model ANOVA was used to ascertain any difference across the means scores over the three data points (baseline, post-intervention, and three-month follow-up) (Brossart, Parker, Olson, & Mahadevan, 2006; Nishith, Hearst, Mueser, & Foa, 1995). The analysis was conducted by the Statistical Consultation Services of Stellenbosch University. In order to avoid Type I error, which is a false positive, and Type II error, which is a false negative, adequate statistical power of a test to detect an effect must be ascertained to not miss a potential effect (Field, 2009). Therefore, statistical power is defined as the ability of a test to be able to find an effect between the IV and DV (Field, 2009). A sample of nine participants across three data time points allowed for adequate statistical power to conduct significance testing using a mixed model ANOVA.
In addition, in the analysis of longitudinal data, such as SCED and time-series designs, the use of mixed model ANOVA is appropriate as it controls for threats such as autocorrelation (also known as serial dependency) with the subjects as random effect, and time as fixed effect. In the present study, the baseline, post-intervention, and three-month follow-up time points were used in the mixed model ANOVA which mitigates the threats of autocorrelation.

7.8 Primary outcome: Post-traumatic stress disorder

In Table 7.6, descriptive statistics illustrate the mean scores on the PSSI-5 measures for all participants (n = 9). A total mean of 30 with a standard deviation of 16 was obtained for all participants across all three time points (baseline, post, and three-month follow-up [3M]).

At baseline, the mean score on the PSSI-5 was 47 with a standard deviation of 9. At post-assessment, the mean score on the PSSI-5 was 23, which indicated a noticeable reduction in PTSD symptoms on the PSSI-5. At three month-follow-up, there is a further reduction in the mean for PTSD symptoms which resulted in an on average negative diagnosis of PTSD on the PSSI-5 (19).

Table 7.6

<table>
<thead>
<tr>
<th>PSSI-5 Mean Scores</th>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Factor</td>
<td>N</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
</tr>
<tr>
<td>time</td>
<td>9</td>
</tr>
<tr>
<td>Baseline</td>
<td>9</td>
</tr>
<tr>
<td>3 M</td>
<td>9</td>
</tr>
</tbody>
</table>
Figure 7.40 illustrates the downward trend in overall PTSD symptoms for all participants who completed treatment (F (2, 16) = 19.87, p < 0.01). The symptom reduction, as measured by the PSSI-5, was observed to be statistically significant from baseline to post-assessment. Yet even though there was an observable reduction from post-intervention to three-month follow-up, it was not statistically significant.

![Graph showing PTSD symptoms over time](image)

*Figure 7.41. PSSI-5 scatterplot.*

To observe the specific aspects of reduction in symptoms of PTSD across all three time points, Table 7.7 provides specific indication as to where statistically significant reduction in symptoms occurred. In row 1, baseline to post assessment for PTSD across all nine participants, a statistically significant (p < 0.01) reduction is observed in symptoms of
PTSD. However, from post to three-month follow-up there is some observable downward trend in symptom reduction, but this was not found to be statistically significant (p = 0.42).

Table 7.7

PSSI-5 Least Significant Differences (LSD)

<table>
<thead>
<tr>
<th>Cell No.</th>
<th>time</th>
<th>{1}</th>
<th>{2}</th>
<th>{3}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>47,111</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>&lt;0.01</td>
<td>23,444</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>3 M</td>
<td>&lt;0.01</td>
<td>0.42</td>
<td>19,556</td>
</tr>
</tbody>
</table>

7.9 Secondary outcome: Depressive symptoms

In Table 7.8, descriptive statistics depict the means scores on the BDI-II measure for the participants (n = 9). A total mean of 19.4 with a standard deviation of 14 was obtained for all participants across all three time points (baseline, post, and three-month follow-up). More specifically, at baseline the mean score on the BDI-II was 32.7 with a standard deviation of 10.8. On average, all participants had severe symptoms of depression. At post-assessment, the mean score on the BDI was 13.4, which is an evident reduction from severe to minimal symptoms of depression. At three month-follow-up, the average symptom reduction at minimum was maintained on the BDI-II (12).
Figure 7.4 illustrates a downward trend in overall depressive symptoms for all participants who completed treatment (F (2, 16) = 17.47, p < 0.01). The symptom reduction, as measured by the BDI-II, was detected to be statistically significant from baseline to post-intervention. Even though there was slight reduction from post-intervention to three-month follow-up, it was not statistically significant, but treatment gains were maintained at three months after treatment.

Table 7.8

**BDI-II Mean Scores**

<table>
<thead>
<tr>
<th>Level of Factor</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>27</td>
<td>19.4074</td>
<td>14.0364</td>
</tr>
<tr>
<td>time Baseline</td>
<td>9</td>
<td>32.7778</td>
<td>10.8141</td>
</tr>
<tr>
<td>time Post</td>
<td>9</td>
<td>13.4444</td>
<td>11.2262</td>
</tr>
<tr>
<td>time 3M</td>
<td>9</td>
<td>12</td>
<td>9.7211</td>
</tr>
</tbody>
</table>
In order to observe the specific aspects of reduction in symptoms of depression, as measured by the BDI-II, across all three time points, Table 7.9 indicates where statistically significant reduction in symptoms occurred. In row 1, baseline to post assessment for depression across all nine participants, a statistically significant ($p < 0.01$) reduction is observed in symptomology. However, from baseline to three-month follow-up there appears to be no clear downward trend in reduction and symptoms of depression appear to have stabilised from post to three-month follow-up ($p = 0.72$). The positive outcome regarding post to three-month follow-up is that participants did not have a significant increase and remained stable in the minimal range of severity on the BDI-II.

*Figure 7.42. BDI-II scatterplot.*
Table 7.9

**BDI-II Least Significant Differences (LSD)**

<table>
<thead>
<tr>
<th>Cell No.</th>
<th>time</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baseline</td>
<td>32,778</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>2</td>
<td>Post</td>
<td>&lt;0.01</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3M</td>
<td>&lt;0.01</td>
<td>0.72</td>
<td></td>
</tr>
</tbody>
</table>

**7.10 Secondary outcome: Anxiety symptoms**

Table 7.10 presents the mean scores on the BAI measures for the participants (n = 9). A total mean of 17.7 with a standard deviation of 11.9 was obtained for all participants across all three time points (baseline, post, and three-month follow-up). At baseline, the mean score on the BAI was 25.4 with a standard deviation of 11.9. At post-assessment, the mean score on the BAI was 16.3, which indicated a reduction in anxiety symptoms from moderate to low anxiety symptoms. At three month-follow-up, there was a further reduction in anxiety symptoms (11.4).

Table 7.10

**BAI Mean Scores**

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Factor</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>time Baseline</td>
</tr>
<tr>
<td>time Post</td>
</tr>
<tr>
<td>time 3M</td>
</tr>
</tbody>
</table>
Figure 7.43 illustrates a downward trend in overall anxiety symptoms for all participants who completed treatment (F (2, 16) = 11.09, p < 0.01). The symptom reduction, as measured by the BAI, was observed to be statistically significant from baseline to post-intervention. Yet even though there is an observable reduction from post-intervention to three-month follow-up, it was not statistically significant, but treatment gains were maintained at three months after treatment.

As in the previous LSD tables for PTSD and depression, in order to observe the specific aspects of reduction in symptoms of anxiety, as measured by the BAI across all three time points, Table 7.1 provides specific indication as to where statistically significant
reduction in symptoms occurred. In row 1, baseline to post assessment for depression across all nine participants, a statistically significant (p < 0.01) reduction is observed in symptomology. However, from post-intervention to three-month follow-up, again, there is no statistically significant reduction in anxiety symptoms for all nine participants (p = 0.12). Even though there is an observable downward trend depicted by Figure 7.45, the reduction was not significant.

Table 7.11

**BAI: Least Significant Differences (LSD)**

<table>
<thead>
<tr>
<th>Cell No.</th>
<th>time</th>
<th>(1) 25,444</th>
<th>(2) 16,333</th>
<th>(3) 11,444</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baseline</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Post</td>
<td>&lt;0.01</td>
<td></td>
<td>0.12</td>
</tr>
<tr>
<td>3</td>
<td>3M</td>
<td>&lt;0.01</td>
<td></td>
<td>0.12</td>
</tr>
</tbody>
</table>

7.10.1 Effect sizes: Hedges’ *g*

In addition to ascertaining positive downward trends and a statistically significant difference, Hedges’ *g* was used to ascertain the extent of the effect sizes from baseline, post, and three-month follow-up for the sample. Calculating an effect size is considered a useful indicator to estimate the overall effect of an intervention. In using a relatively smaller sample, compared to large group-based designs, the use of Hedges’ *g* is preferred as it limits any upward biases or overestimations which can be found in other measures such as Cohen’s *d* when using small samples (Hedges & Olkin, 1985; Turner & Bernard, 2006). Overall, Hedges has been found useful in estimating effect sizes in large and small samples and has also proved valuable in estimating effect sizes in clinical practice for groups that are equal or
less than 20 (Turner & Bernard, 2006). Interpreting an estimated effect is as follows: 0.2 (small effect), 0.5 (medium effect), and 0.8 (large effect).

In Table 7.12, on the PSSI-5 for PTSD from baseline to post-intervention, a huge effect was observed across all nine participants ($g = 2.2$), and from post-intervention to three-month follow-up a small effect size was calculated ($g = 0.32$).

Table 7.12

*PTSD Effect Size*

<table>
<thead>
<tr>
<th>time</th>
<th>{1}</th>
<th>{2}</th>
<th>{3}</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Baseline</td>
<td>2.2(huge)</td>
<td>2.49(huge)</td>
<td></td>
</tr>
<tr>
<td>2 Post</td>
<td>2.2(huge)</td>
<td>0.32(small)</td>
<td></td>
</tr>
<tr>
<td>3 3 M</td>
<td>2.49(huge)</td>
<td>0.32(small)</td>
<td></td>
</tr>
</tbody>
</table>

On the BDI-II for depression from baseline to post-intervention, Table 7.13 depicts the huge effect observed across all nine participants ($g = 1.67$), and from post-intervention to three-month follow-up a less than small effect size was calculated ($g = 0.13$).

Table 7.13

*Depression Effect Size*

<table>
<thead>
<tr>
<th>time</th>
<th>{1}</th>
<th>{2}</th>
<th>{3}</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Baseline</td>
<td>1.67(huge)</td>
<td>1.92(huge)</td>
<td></td>
</tr>
<tr>
<td>2 Post</td>
<td>1.67(huge)</td>
<td>0.13(negligible)</td>
<td></td>
</tr>
<tr>
<td>3 3M</td>
<td>1.92(huge)</td>
<td>0.13(negligible)</td>
<td></td>
</tr>
</tbody>
</table>
As found with PTSD and depression, for anxiety from baseline to post-intervention, Table 7.14 illustrates a large effect was observed across all nine participants \((g = 0.76)\), and from post-intervention to three-month follow-up a medium effect size was calculated \((g = 0.43)\).

Table 7.14

<table>
<thead>
<tr>
<th>Anxiety Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
</tr>
<tr>
<td>1 Baseline</td>
</tr>
<tr>
<td>2 Post</td>
</tr>
<tr>
<td>3 3M</td>
</tr>
</tbody>
</table>

### 7.11 Chapter summary

The chapter presented an overview of the brief PE intervention results. The results showed clear downward trends in symptom reduction for PTSD and depression. Yet for anxiety, as measured by the BAI, no clear trend was observed as too much variability occurred across participants. A mixed model ANOVA found that the brief PE treatment had significantly reduced symptoms across all three outcomes from baseline to post-assessment. In addition, large effect sizes were observed from baseline to post-intervention. Participants remained stable with no significant increase or decrease from post-intervention to three-month follow-up. The results are discussed in Chapter 8.
Chapter 8

Phase 2: PE Intervention – Discussion

8.1 Introduction

This chapter presents a discussion of the brief PE intervention results. The chapter also provides a contextualised discussion of the treatment process and focuses on pertinent obstacles that occurred during the intervention. The chapter concludes by presenting a reflective discussion, from a therapists’ perspective, on the nature of administering PE as a trauma therapy.

8.2 Discussion

Based on the results presented in Chapter 7, most participants (78%) who completed treatment had a negative diagnosis for PTSD at the end of three-month follow-up. Similar positive outcomes were observed for depression on the BDI-II. The majority (88%) of the participants reported minimal symptoms of depression at three-month follow-up. However, only half of the sample (55%) had minimal symptoms of anxiety at three-month follow-up, with the remaining participants still in the range of moderate to severe symptoms for anxiety.

The visual downward trends were also supported by statistical analysis. The mean reduction from baseline to post-assessment on all three outcomes (PTSD, depression, and anxiety) were found to be statistically significant \((p < 0.01)\), with large effect sizes for PTSD \((g = 2.2)\), depression \((g = 1.67)\), and anxiety \((g = 0.76)\) from baseline to post-assessment, with the largest effect for PTSD. Treatment gains for all three outcomes were maintained at three-month follow-up, which means that on average, participants did not have a statistically significant increase or decrease in symptoms after treatment.
An advantage of a single case experimental design is the observation of the treatment effect within and across participants (Kratochwill & Levin, 2010). Based on visual inspection, the across participant downward trends are suggestive of a replication of the treatment effect for PTSD during the intervention (see Figure 7.38 in chapter 7). Based on the intervention phase scores, across session habituation can be observed for most of the participants over the six-session intervention. Yet variability in PTSD symptoms are also evident, especially during the middle of treatment and, for some, at the end of treatment.

Foa et al. (2002) found that symptom increase during treatment is transitory and reduces as treatment continues (Larsen et al., 2016). This observation is consistent with emotional processing theory (Foa & Kozak, 1986). According to Foa and Kozak (1986), adequate activation of the trauma memory can increase subjective levels of distress within sessions and during treatment, yet the levels of distress are predicted to decrease as emotional processing continues. The findings of the during intervention PCL-5 scores support the findings by Foa et al. (2002) and Larsen et al. (2016) that exposure therapies such as PE are not iatrogenic, and that distress during treatment tend to decrease as emotional processing of the trauma memory continues.

In addition, treatment fidelity, across all participants, was assessed to be “good” by independent assessors. In addition to enhancing the validity of the treatment outcomes, fidelity measures also allowed for a closer observation of the treatment process. For example, sessions where fidelity was assessed to be less than adequate can be explored to ascertain what the treatment obstacles were. The treatment challenges are discussed in the following section.

The results of the brief PE intervention reject the null hypothesis. Therefore, the theoretical prediction (Chapter 2) has not been falsified, which is that trauma survivors who complete six sessions of brief PE will have reduced symptoms of PTSD and maintain their
symptom reductions at three-month follow-up. The results of the intervention are also consistent with similar small sample intervention studies of PE for PTSD (e.g., Tolin & Foa, 1999; Rauch et al., 2009; Willis et al., 2015).

8.3 Treatment process: Obstacles and considerations

Idiographic research also provides an opportunity for a more detailed observation of individual cases such as personal and contextual variables which might mediate the treatment process (Barlow et al., 2009; Kratochwill & Levin, 2010).

Both Farren and Annelise’s index traumas occurred more than 10 years prior to treatment. It can be argued that both Farren and Annelise had survived traumas at an early developmental phase as children and/or adolescents. Notably for Farren, she found it difficult to recount exactly what had happened to her as a child. Once treatment started, she relied on what she knew and could remember, but once she started to engage in the exposure phase of treatment, she found imaginal exposure too distressing as she never spoke about her trauma. Alternatively, she prepared a written account and opted to read out loud what she could recall about her experiences of sexual assault. This enabled us to process her thoughts and emotions regarding her trauma memory. Farren’s case highlighted the flexibility that is required in implementing PE (Hembree et al., 2003). Hembree et al. (2003) emphasise, among others, that working collaboratively and tailoring PE to the individual needs of the client is key to the successful implementation of PE as a trauma therapy.

Yet in the case of Annelise, implementation of PE was particularly challenging which affected the fidelity of the treatment implementation. Treatment fidelity scores for Annelise were the lowest of all participants who received treatment (40%). Annelise had a prolonged history of early childhood emotional abuse and neglect. She found it difficult to focus on one specific trauma during treatment and ruminated excessively about her relationship with her
An estranged father. In addition, Annelise reported to be distrustful of others and found it difficult to make friends. For example, she was quite concerned that people might want to know more about her, for example, where she came from and her family, thus she was quite guarded when interacting with people. As a result, establishing a therapeutic alliance with Annelise was fragile at best as she, at times, was guarded about revealing too much detail regarding her history. Her mood and affect also appeared to be incongruent, for example, she would recount traumatic experiences and would laugh out loud about her experiences. As a result, adhering to the treatment structure and adequate activation of her trauma memories was difficult to achieve during treatment.

Foa and Kozak (1986) state that in order to enable emotional processing, adequate activation of the trauma memory is necessary. Theoretically, Annelise’s engagement during treatment can also be considered as cognitive avoidance to engage in her traumatic experiences. For example, Annelise reported a prolonged history of trauma throughout her life. Yet she seemed to trivialise her experiences and mostly sought advice on how to manage her relationship with her father. As a result, Annelise appeared to not have wanted a direct engagement with her traumatic experiences but preferred a peripheral engagement which focused on advice-seeking regarding her complex relationship with her father.

Due to Annelise’s complex trauma history, and her difficulty in adhering to the structure of PE, it was necessary to reflect on the rationale of treatment and find a way to adhere to the process. However, it became apparent that due to Annelise’s complex trauma history, her mental state functioning, and her cognitive avoidance during treatment, adequate implementation of PE would be limited. We engaged in an open discussion about the treatment process in an attempt see how best Annelise could benefit from treatment given the complications.
It can be argued that Annelise, in addition to a diagnosis of PTSD, could also have had a second primary disorder, for example, borderline personality disorder (BPD) and/or complex-PTSD (cPTSD). In the case of BPD as a comorbid disorder in a population with PTSD, research has found that the prevalence of PTSD/BPD is higher than 25% in a clinical sample (Frost, Hyland, Shevlin, & Murphy, 2018; Heffernan & Cloitre, 2000; Pagura et al., 2010). As a result, attempts have been made to delineate distinct latent class structures between PTSD, BPD, and cPTSD. The results of these attempts will enhance the assessment and treatment of traumatic stress, yet debates continue regarding the construct validity of disorders such as cPTSD (see Achterhof, Huntjens, Meewisse, & Kiers, 2019; Cloitre et al., 2020; Frost et al., 2018; Ford, 2020).

Although the presence of comorbid personality disorders, among others, were not formerly assessed at baseline, speculative remarks regarding Annelise’s clinical presentation of affect dysregulation and disrupted interpersonal difficulties during treatment could arguably be considered as to why implementation of PE was so challenging (Frost et al., 2018). Additionally, the experience and skill level of the therapist is not exempt as a potential limitation to the adequate implementation of the treatment process.

Persons with a comorbid personality disorders are not necessarily excluded from PE, yet the symptoms associated with personality disorder have usually been part of exclusion criterion for the treatment of PTSD (Foa et al., 2007; van Minnen et al., 2012). As a result, Annelise could also have benefited from a trauma therapy that included aspects of an interpersonal and emotional regulation process (e.g., Cloitre, Koenen, Cohen, & Han, 2002).

In the case of Tamara, her symptoms remained at a clinical level throughout the treatment process. Tamara was raped on two separate occasions and had an emotionally guarded relationship with her parents. Other than confiding in her younger sister, she also reported to have had limited social support. Tamara was primarily under-engaged during
exposure as she reported having had difficulty allowing herself to emotionally connect to her experiences. Hembree et al. (2003) describes under-engagement as the difficulty in accessing affective components related to the traumatic experience. For example, Tamara could describe the trauma memory in detail but remained emotionally aloof during the recounting.

Tamara’s under-engagement proved to be a decisive obstacle during treatment which had a major impact on the outcome of treatment. As suggested by Hembree et al. (2003), we reflected on the rationale of treatment and used analogies to highlight the benefit of exposure. However, Tamara’s over-engagement, which also due to alexithymia and/or emotional numbing, which is associated with childhood traumas and interpersonal difficulties, had a significant effect on the outcome of trauma therapy (Zorzella et al., 2019).

Tumi also reported having a prolonged history of multiple traumas since childhood. In addition to her trauma symptoms, she presented with severe symptoms of depression (e.g., depressed mood, low self-worth, and anhedonia) and dissociative states during sessions. Hagenaars, van Minnen, and Hoogduin (2010) found that depression and dissociative traits are not contraindicated to PE as a suitable treatment, but in the case of Tumi, focusing on her index trauma was affected by her severe symptoms of depression. As a result, Tumi had a need to also focus on aspects related to her depressive symptoms (i.e., self-worth).

In the abovementioned cases, I had to carefully balance the treatment focus and the needs of clients through re-explaining the function and benefit of imaginal exposure and mitigating the effect of avoidance during treatment. Therefore, the subjective experience of fear and/or avoidance by a participant requires tactful and critical engagement to rule out any form of surreptitious avoidance in treatment.

The nature of the social context also affected the treatment process. For example, both Ninah, Sam and Olivia were either re-exposed to trauma or knew that their perpetrators
resided in the same community and/or social context as they did. The impact of an insecure context had a clear effect on the process of treatment and how participants experienced intervention. Olivia reported that the person who had raped her was still attending classes at the same university as she attended, and due to an increased awareness of alleged sexual violence on her university campus, some of her trauma symptoms returned.

In the case of Ninah, her traumatic stress was exacerbated by her status as an asylum-seeker in South Africa. Consequently, she had increased symptoms of depression and blamed her home country for her struggles. It is suggested that her status as an asylum-seeker and experiences of xenophobia and displacement in South Africa perpetuated, to some extent, the violence she had escaped from in leaving the DRC (Stenmark, Catani, Neuner, Elbert, & Holen, 2013). In addition, she reported at the start of session 3 that she escaped a second attempted mugging. She also reported having received WhatsApp messages from unknown persons containing xenophobic-related threats during the treatment phase. As a result, Ninah was distressed when attending sessions due to the risk of xenophobic violence. Ninah was given the option to discontinue treatment due to real safety concerns, but she chose to continue.

Similar to Ninah, Sam was a South African citizen, who lived in a context of continuous gang-related violence, which may have exacerbated and or perpetuated her symptoms of PTSD (e.g., Eagle & Kaminer, 2013). In the case of Sam, she reported to have been exposed to continuous sounds of gunshots and gang violence in her community. Sam’s contextual factors of residing in a resource-constrained community with marked levels of gang violence impacted the process of treatment. Sam had to engage in trauma-focused therapy whilst returning to an environment which she associated with danger and the likelihood of re-traumatisation. In addition, Sam held the belief that the persons who had killed the younger-age male might attack her because she had witnessed the shooting. This
belief, it can be argued, was not entirely irrational as she lived in an area in which gang violence was prevalent and social services, such as policing, limited.

As a result, careful considerations were made regarding how she engaged in in vivo activities and which fears were in the past and which were more related to present dangers in her community. In addition, Sam’s avoidance of engaging in exposure during the latter half of treatment might also have been understood as an attempt to maintain her improved functioning. Yet theoretically, and critically, Sam’s behaviour could also have been avoidance, and her hesitance to engage in recounting her experience could be evidence of the existence of fear related to the trauma memory.

In the case of Bongi, who was sexually assaulted by three men, she found processing and integrating the cognitive aspects of her trauma difficult. For example, Bongi found it difficult to accept that she was a survivor or victim of sexual violence. Integrating this experience as part of her identity was a major part of the emotional processing for her. During treatment Bongi had to process her negative cognitions and emotions related to her experience of sexual violence and how it influenced her self-concept. Changes in negative cognitions have also been found to be a mechanism of change in the treatment of PTSD (Mclean, Yeh, Rosenfield, & Foa, 2015).

The managing of adverse events during the study was also an important aspect of the treatment process. In the case of Thandi, she reported to have returned to the location of the traumatic event. Thandi’s impromptu return to the site of the trauma occurred without my knowledge as the treating therapist. As seen in Chapter 7, Thandi had elevated scores for PTSD as a result of her site visit. Murray, Merritt, and Grey (2015) state that returning to the site of the trauma can be a useful aspect of trauma-focused work, but necessary planning, rationale, and management of such procedures are necessary. Although a potential high-risk action, we used the event as a means of emotional processing, and the nature of her recovery
as delineated by PE and emotional processing theory. In addition, both Olivia and Tamara had elevated scores for PTSD at three-month follow-up. Theoretically, Tamara’s symptomatic state at three-month follow-up could have been related to obstacles such as under-engagement of the trauma memory during treatment. For Olivia, she reported that due to her social context, her symptoms of trauma returned due to the prevalence of sexual violence in the context where she lived. Both Olivia and Tamara were contacted to enquire about their functioning. They were also strongly advised to not hesitate in seeking psychological intervention at the nearest counselling centres.

The brief PE intervention produced statistically significant outcomes for PTSD, depression, and anxiety at two community-counselling centres at a primary care level. These findings are in support of massed PE interventions at primary care level (Cigrang et al., 2017; Foa et al., 2018; Rauch et al., 2017). The benefit of massed trauma interventions exists in that they enhance the likelihood of dissemination and implementation in real-world clinical settings, especially in LMICs.

8.4 Implementation of PE as a trauma therapy: Reflection and insights

Hembree et al. (2003) delineate the process of administering PE and how to navigate certain challenges encountered in treatment. The abovementioned section described some of the obstacles and considerations that arose during the treatment process. Treatment fidelity is an essential component, to not only enhance internal validity, but also the successful implementation of ESTs (Whiltsey-Stirman et al., 2015). Given the obstacles encountered in disseminating and implementing ESTs such as PE, it is also useful, in addition to sophisticated experimental studies, to share the clinical experiences and insights of persons administering PE. This can assist in nullifying misconceptions regarding ESTs, especially exposure therapies such as PE (see Zoellner et al., 2011).
First, it is valuable to have clinical training and experience and to be familiar with the basics of counselling, such as empathy, building rapport and effective listening, to be non-judgemental and congruent (see Rogers, 1951). Demonstrating basic counselling skills such as empathy and an unconditional positive regard, whilst administering PE, proved to be invaluable. More importantly, building rapport and establishing a therapeutic alliance with a client is an essential building block to any psychotherapy, especially a structured exposure treatment such as PE (Hembree et al., 2003).

In addition, clinical experience can also assist a clinician when obstacles are encountered in treatment. For example, some of the participants, such as Tumi who had a need to also explore aspects related to her depression, found the PE structure frustrating at times. In these moments, it is useful to apply skills such as being genuine and congruent about the frustration observed in treatment, and to use those reflective moments to further enhance an alliance and to see how best to continue with treatment.

Second, in addition to knowing the basics of counselling, clinicians must know the treatment model and understand the theory that informs PE. For example, understanding the theory of PE can assist clinicians in understanding why they, as a clinician, would request a client to recount a distressing traumatic experience over several sessions. Furthermore, it proved useful to be creative and genuine in explaining the purpose and rationale of PE to clients. The goal is to ensure that clients have a clear understanding of PE as this will determine the process and outcome of treatment.

Third, it is important to not only access supportive supervision as a trauma therapist but also to gain feedback on treatment related aspects of the implementation of PE. It was valuable to consult peers and experts on various aspects related to the treatment process of PE for PTSD. For example, speaking to and attending various forums on administering PE assisted my own growth, knowledge, and confidence as a trauma therapist.
Lastly, as a clinician it is necessary to understand what makes the treatment effective. Therefore, it is important as a clinician to critically engage with the available evidence of the treatment. Clinicians must be confident about the potential benefits of the treatment. A clinician’s confidence must be part of the treatment process as clients can also benefit from working with a clinician who believes in the treatment. In addition, it is also important to be genuine about the limitations about the treatment and to openly discuss difficulties in treatment.

8.5 Chapter summary

The chapter described the results of the brief PE intervention. Overall, the treatment produced statistically significant outcomes and had large effects across all three outcomes. In addition to the overall outcomes, specific treatment process issues were also discussed that related to treatment fidelity. The brief PE treatment proved to be effective, yet clinicians need to have adequate knowledge, and confidence in order to implement PE in a flexible but fidelity-consistent manner.
Chapter 9

Phase 3: Trauma survivors’ experience of PE for PTSD

9.1 Introduction

This chapter presents the findings of the interviews conducted with the trauma survivors who participated and completed the brief PE intervention. First, a brief review of the qualitative method and research design is discussed. Second, I report the results with a specific focus on the superordinate and themes identified in the data set. Lastly, the chapter concludes with a discussion of the results in relation to the extant literature on the experiences of trauma survivors receiving PE for PTSD.

9.2 Thematic analysis

As in Chapter 5, TA was chosen as the qualitative method due to its focus on the experiences of an individual, and how participants experienced and made sense of PE as a trauma therapy for PTSD. In using TA, trauma survivors from a resource-constrained context could reflect on their experiences of traumatic stress, but also on how they experienced PE as a treatment and how they made sense of the treatment process. Exploring how clients experienced PE in the present study was an important consideration as client safety and dropout rates regarding PE, and exposure therapies in general, are still debated issues (e.g., Becker et al., 2004; Foa et al., 2002; Hundt et al., 2018; Kilpatrick & Best, 1984; Larsen et al., 2016; van Minnen, Hendriks, & Olff, 2010).
9.3 Phase 3: Procedure

9.3.1 Participants – trauma clients

Based on a purposive sampling method, clients (n = 7) who completed the intervention were invited to participate in the post-intervention interview. Data or sample saturation is not entirely consistent with the values and assumptions of TA, and that the value of qualitative research is within the interpretive work and not the amount of data (Clarke & Braun, 2019). The sample size of the post-intervention (n = 7) was deemed appropriate due to a thick description of each individual case (Braun & Clarke, 2006). Two participants who completed the intervention could not participate in the interviews due to logistical difficulties, and three participants who dropped out of treatment did not qualify to participate in an interview.

Brief participant descriptions are provided to contextualise each participant. Pseudonyms were used to protect the identity of the participants. Each participant is described in relation to her personal history and personal context. In doing this, each case is highlighted in their respective individuality and how their experiences provide a contextually relevant description of their lived experiences of PE for PTSD.

As the therapist, I did not conduct the interviews due to a conflict of interest. The interviews were conducted by independent RAs. These RAs were graduate students in psychology. This ensured that clients felt comfortable and willing to be honest about their experiences of PE. I also encouraged clients at the end of the intervention to express their opinions and thoughts about how they experienced the therapy process. Before and after each interview I met with the RA to obtain feedback regarding the interview process. These reflective sessions provided valuable data on the process of the interview, any significant aspects related to the participant, and how the interviewer experienced the process.
9.3.2 Participant descriptions

9.3.2.1 Thandi

Thandi, a 25-year-old pharmacy student from Johannesburg, entered treatment four months after she was physically assaulted and stabbed with a knife. Thandi lived alone in university residence. As a child, she was sexually assaulted at age five to 11 years. The perpetrator was an older female friend of the family. As a young adult, Thandi was raped at age 22 by a childhood male friend at her house. As a result, Thandi had a long history of being in psychotherapy for depression, and she tended to isolate herself. Thandi identified as an African female and she spoke English and Pedi. She also considered herself as Christian and was not in a romantic relationship at the time of the intervention.

9.3.2.2 Farren

Farren, a 20-year-old Coloured female from Cape Town, lived and studied in the EC. At age five, Farren was raped and sexually assaulted by one of her female cousins. At age 12 she was sexually assaulted by her uncle, but she managed to call for help. Farren had a fragmented trauma memory as she was a child when the traumas occurred. Consequently, throughout her adolescent and young adult life she has isolated herself and found it difficult to make new friends or to engage in romantic relationships. As a student, Farren participated in social activist movements against gender-based violence as a means of self-recovery. She reported that her family has never spoken about what happened, although her mother has been supportive.

9.3.2.3 Olivia

Olivia, a 21-year-old Coloured female student from Pretoria, studied in the EC. Olivia lived in university residence and was not in a romantic relationship. She entered treatment
eight months after she was raped by one of her university friends. Olivia did not report the rape to the police services. She stated to not know how her family would react and was concerned that her parents might have asked her to return to Pretoria. Olivia felt somewhat confused about the rape because it was perpetrated by someone she trusted. Only the following day after the trauma did she realise what had happened and she ended her friendship with the perpetrator.

9.3.2.4 Tumi

Tumi, a 21-year-old Black African female from Johannesburg, studied in the EC. She reported had a history of early childhood traumas. Tumi reported that at age seven until 12 years she was sexually assaulted by her male cousin, at age nine she witnessed her father being shot, at age 14 she was physically attacked with a knife, and at age 17 her grandmother suddenly passed away due a motor vehicle accident. Tumi had been in psychotherapy from an early age to work on issues of depression and anxiety. During treatment, Tumi presented with high levels of depression and dissociation during treatment. Tumi was in a romantic relationship at the time of treatment and she struggled academically.

9.3.2.5 Bongi

Bongi, a 20-year-old Black African female from Butterworth in the EC, was sexually assaulted in her hometown by three unfamiliar men. Three months after the assault, Bongi entered treatment and reported to have temporarily lost consciousness during the attack and was unsure of the extent of the assault. During treatment, Bongi struggled to integrate the experience of being sexually assaulted with her self-concept. She found it difficult to be emotionally vulnerable as she always thought of herself as a strong and independent person.
As a result, Bongi found it difficult to allow her family, especially her mother, to support her during her trauma.

9.3.2.6 Annelise

Annelise, a 27-year-old White Afrikaner female, had a history of early childhood emotional and physical trauma. As a child, she witnessed interpersonal violence between her mother and father. At age 16 she witnessed her mother being shot and killed during a break-in at their house. At age 22, she reported to have been raped by one of her work colleagues. More recently, whilst working abroad, she was stalked by an unfamiliar male for about a year and decided to return to South Africa. Annelise found it difficult to trust other people and felt afraid that her father might find her, yet she also wanted some form of relationship with him.

9.3.2.7 Tamara

Tamara, a 20-year-old Black African female from Kwa-Zulu Natal, lived and studied drama in the EC. Tamara reported that she was raped at age 15 and again at age 18. Tamara had a history of depression, difficulties with a low self-esteem, and a restricted relationship with her parents, especially her father. She described her parents as strict and emotionally unavailable and had not told them about her sexual trauma. She described herself as a submissive person with low confidence and did not know how to defend herself against her perpetrators. Tamara found it difficult to talk about her past and current experiences, and she tended to avoid emotionally overwhelming experiences.

9.4 Data collection

For this phase, clients were invited to participate in a post-intervention interview. Participants were asked to think about how they experienced the process of PE, how they
made sense of the experience, and to share any reflections related to their experience of the treatment.

Semi-structured individual interviews were conducted to explore how trauma survivors experienced PE for PTSD. An interview schedule (see Appendix Q) guided all interviews. The interview schedule was adjusted and refined as the interviews progressed. For example, during supervisory consultations, interview questions were assessed for clarity and relevance. In addition, I also consulted various qualitative literature on TA to ensure the appropriateness of the interview schedule (see Braun & Clarke, 2006).

Interviewers were also cognisant of allowing flexibility (semi-structured) to enable an authentic and reciprocal engagement during the interviews. Interviews were audio-recorded and transcribed by an independent person. Audio recorded interviews and transcribed sessions were stored in a password protected Dropbox account owned by me. All participants had the right to request a copy of the audio recording, of which there were none requested copies of an interview. All post-interviews were conducted at the respective organisations, which allowed for minimal disruption and unnecessary financial cost (e.g., travelling cost) for the participants.

9.5 Data analysis

As in Chapter 5, TA guidelines were used to analyse the textual data. TA has a systematic, but also flexible, set of guidelines to analysing qualitative data (Smith et al., 2009). As described in chapter 5, I immersed myself in the data of each participant to understand and describe their general experiences and perspectives. In analysing the qualitative data, the following steps were taken, but necessary modifications were considered (e.g., reflexivity) to enhance the rigour and integrity of the analytical process (Braun & Clarke, 2006).
Based on the guidelines of Braun and Clarke (2009), I read and re-read interview transcripts to familiarise myself with the data. During this initial phase, I also checked the accuracy of the transcripts by listening to the audio recorded sessions whilst reading the transcripts. Second, throughout the initial reading process I made notes on each transcript as notetaking facilitates creating an overall impression of each participant. I could refer to my initial notes throughout the analytic process. In making notes, I used the three coding levels described by Smith et al. (2009), which is descriptive coding, linguistic coding, and conceptual coding (see Figure 7.1).

**Figure 7.1. Example of coding.**

Third, I started to identify emerging themes for each participant to maintain an idiographic approach and searched for connections across themes in each participant before moving to the next participant (see Figure 7.2). The process of identifying themes was an
iterative process to allow for an accurate capture of pertinent themes. For example, some initial themes were refined, combined, or removed if found to be irrelevant. Lastly, I searched for broader themes across all participants who were interviewed. I was also required to maintain a careful balance between the individual and the collective throughout the write-up of the qualitative results.

<table>
<thead>
<tr>
<th>Emergent themes</th>
<th>Super-ordinate themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapy approaches</td>
<td>Different therapies</td>
</tr>
<tr>
<td>Experience of therapy</td>
<td>Concept of counselling</td>
</tr>
<tr>
<td>Differing approaches</td>
<td>Gender in therapy</td>
</tr>
<tr>
<td>Ambiguity in previous treatments</td>
<td>Personal growth</td>
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<tr>
<td>Open-minded family</td>
<td></td>
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<tr>
<td>Counselling a taboo</td>
<td></td>
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<tr>
<td>Family open to counselling</td>
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<tr>
<td>Personal support</td>
<td></td>
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<td>Mental health in family</td>
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<tr>
<td>Relativity of gender and race</td>
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<td>Open and reflective about race and gender</td>
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<td>Race and gender</td>
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<td>Race and gender</td>
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<tr>
<td>Being helped</td>
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<td>Accepting help</td>
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<tr>
<td>Personal growth</td>
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<td>Long term struggles</td>
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<tr>
<td>Withdrawn person</td>
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<tr>
<td>Personal growth</td>
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<tr>
<td>Effects of trauma</td>
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<tr>
<td>Being vulnerable</td>
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</tbody>
</table>

*Figure 7.2. Example of developing participant superordinate themes from emergent themes.*

**9.6 Trustworthiness of the qualitative data**

In qualitative research, the reliability and validity of the data are referred to as the trustworthiness of the findings. Qualitative researchers have recommended various strategies to ensure the trustworthiness of qualitative studies (e.g., Guba & Lincoln, 1985; Shenton, 2004). I attempted to maintain the trustworthiness of the qualitative data and findings using several strategies. I had regular meetings (in person or via Zoom and Skype) and written consultations with my supervisor about the qualitative phases and interviews.
I ensured the accuracy of the data by recording the interviews. Transcripts were checked by listening to the audio recordings. Transcripts were made available to the research supervisor to check if necessary. A paper trail of my analysis was kept and saved in a Dropbox account. This was to allow any relevant person (e.g., examiner) to check the evidence of my analysis procedure. The analysis of qualitative data was checked by my supervisor through commentary on my draft chapters and supervisory meetings.

9.6.1 Sensitivity to context

As discussed in Chapter 5, sensitivity to the context was included in this phase to enhance the validity and credibility of the analysis and findings. I was cognisant of the context backgrounds of each participant and included this in my analysis. The incorporation of the extant literature on trauma clients and exposure therapy was also included to determine how the results relate to the extant literature.

9.7 Findings

This section presents the findings of phase 3. Superordinate themes are a means of grouping similar themes into the same cluster (see Table 9.1). The themes are discussed and supported by textual evidence from individual participants. The themes presented below are representative of the most salient lived experiences of seven trauma survivors, and how they experienced PE as a trauma therapy for PTSD.
Table 9.1

Superordinate Themes and Themes – Trauma Clients

<table>
<thead>
<tr>
<th>Superordinate themes</th>
<th>Themes</th>
</tr>
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</table>
| 1 Implementation of PE | Room for improvement: “it is nice to hear that it’s not your fault”  
Obstacles: “cure my problem”  
Gender: “talking about my experiences with a man” |
| 2 Adapting to PE | PE structure: “all my issues”  
Exposure: “are we really going to deal with my issues here?”  
Noticing change: “I’m actually dealing with things” |

9.8 Superordinate theme 1: Implementation of PE

In this superordinate theme I describe how participants reflected on the process of PE, aspects related to how the therapist administered treatment, and thoughts related to gender difference in treatment. Three themes were identified, namely, room for improvement: “it is nice to hear that it’s not your fault”, Obstacles: “cure my problem”, and gender: “talking about my experiences with a man” make up this superordinate theme.

9.8.1 Room for improvement: “it is nice to hear that it’s not your fault”

In this theme I describe how participants reflected on the aspects which they felt were missing in treatment. Farren reported that even though she benefitted from treatment, she would have wanted more time to reflect on additional issues in her life and to have been more prepared to engage in procedures such as exposure. For example, Farren would have preferred “a lot more focus on ‘let’s reflect on this recounting, what did we learn, what did we not learn’”. Farren’s comment not only highlights a need for more reflective engagement but also that she experienced a limited amount of emotional processing of her experiences.
during the sessions. For Farren, a greater emphasis on reflective and emotional processing of her experiences would have added more value to her experience of the treatment.

For Tamara, talking about a sensitive experience such as rape proved to be challenging at times. She reflected on how she wanted the therapist to be more reassuring when she spoke about her experience of rape:

*With a topic like rape it is very easy…like unintentionally say things that may sound judgmental. So I know there’d sometimes be instances where he would ask questions like…questions that made me…I can’t think of the specific questions, but questions that would sometimes make me second guess myself and think maybe I could have done something to prevent it. And I mean I know that was probably an unintentional thing, but I did sometimes feel like…or maybe it’s just that I expected there to be, uhm...a…emphasis on ‘it wasn’t your fault, it wasn’t your fault’.*

In this lengthy extract, Tamara carefully and poignantly described her experience of how the therapist did not provide enough support, warmth, and reassurance during her reporting of her experience of rape. For Tamara, instead of an overly professional and somewhat clinical exploration of her trauma, she needed more reassurance and warmth. Yet in her reflection she is also aware of the complexity and sensitivity experienced when talking about rape, and how such a sensitive exploration of an experience can potentially be interpreted in several ways via the actions or inaction between the trauma survivor and the therapist. Nevertheless, her reflections are critical and insightful as feedback pertaining to the more subtle and sometimes overlooked intersubjective experiences of trauma therapy.

These reflections demonstrate how crucial experiences in trauma therapy can be undetected by a therapist, and that the only opportunity for growth and a better implementation is through feedback to a therapist.
9.8.2 Obstacle: “cure my problem”

In addition to how subtle intersubjective processes might be overlooked in therapy, participants reported feelings of frustration toward PE and the therapist. Annelise, a 27-year-old female from Johannesburg, had a history of prolonged emotional and physical trauma during her childhood, and rape as a young adult. Annelise reported having experiences of frustration towards PE and the therapist. She stated that she wanted "*a one sentence answer to cure my problem*". It is possible that she entered treatment with a specific expectation of receiving a "*cure*" that could resolve her trauma and specifically her relationship with her father.

Her use of "*one sentence answer*" and "*cure*" is indicative of a tangible and fixed outcome. The incongruence between what Annelise expected and the actual intervention resulted in experiences of frustration during treatment. As a result, she expressed her need for wanting a therapist that could give her answers, "*like I needed someone like Duane to tell me ‘well stop that!’*”. Annelise’s need for answers led her to be critical of anything different from what she expected ("*instead of telling me the answer, you ask me something stupid…*’’). Annelise’s expectations of treatment and her criticism led her to feel frustrated by a structured therapy focused on treating PTSD. Annelise’s general experience of PE and the therapist is reflected in the following extract:

*I could not see a method. I did not know what to expect, I can tell you that. I did not know like – even if I would leave a counselling session, I was not sure why [he] would do what he did. And then the next time I was not sure what we are going to do now.*

The above-described extract could reflect her frustration and some amount of annoyance towards the therapist. However, Annelise’s critical stance towards treatment and
the therapist appeared to change at times. Annelise reported that in “the last session he really came through. The last session he gave me...what I have been looking for...he gave me something meaningful in the last session”. The use of the words such as “he really came through” and “what I’ve been looking for” could suggest that she found what she wanted “answers” to. As the treating therapist, Annelise and I had an open conversation about her relationship with her estranged father. I expressed my understanding of how she could make sense of the trauma that her father inflicted on her as a child. It can be argued that Annelise only wanted a “cure” to resolve her suffering, but did not want to engage, by means of PE, in confronting and processing the actual experiences of trauma.

Tumi had a history of early childhood trauma of rape, physical assault, and depression. Given Tumi’s prior experiences of sexual abuse, she found it difficult to understand why she experienced such traumatic events in her life. Tumi reported that recounting her trauma memory was “impersonal” and that too much attention, according to her, was based on recounting the actual event compared to focusing on her broader experiences of distress, for example, understanding why she had to experience such difficult events. Tumi stated “that it gets impersonal” and the focus is more on the actual event and not about her difficulties. This resulted in feelings of irritability towards the therapist and that the structure of treatment did not allow for enough processing of longer standing difficulties of depression and low self-esteem.

Even so, Tumi did not drop out of treatment. Tumi acknowledged that she benefitted from the PE treatment (“I feel like I’ve learnt quite a bit about myself, and I feel like I have come out with like stuff that I can like try if ever in a situation”), and that: “[I] appreciate that I did it and I’m glad it [PE] exists, but I acknowledge that within myself that there still a lot more to do”.
The experiences of Annelise and Tumi highlight the importance of some of the obstacles clients and clinicians can experience. In addition, this theme also highlights the importance of finding a balance between the central and secondary focus in treatment.

**9.8.3 Gender: “Talking about my experiences with a man”**

In this theme I discuss how participants experienced the gender difference between the therapist and the participants in therapy. Noticeably, all participants were female, and the therapist was male. Participant perceptions and experience of trauma therapy with a male therapist provide key insight into how female trauma survivors experienced receiving treatment from a male therapist.

Participants had varied experiences ranging from those who preferred a female therapist and those who had no preference. Olivia stated: “I would have felt more comfortable like being with a female”, and when Tamara was asked to think about any challenges regarding the therapist, she stated: “I think probably the only thing that made it hard was the fact that he was a man, but that’s...yeah (laughs)”. Yet Farren and Tumi reported the contrary to Olivia and Tamara. When asked, Farren stated: “No, I don’t think so”, and when Tumi was asked if she felt restricted in sharing any of her experience due to the difference in gender, she responded: “I don’t think so”.

These sentiments indicate that gender difference in trauma therapy seems arbitrary but should still be considered as a mediating factor in trauma therapy, which requires adequate consideration and engagement due to the potential implications for treatment. The following extracts highlight key aspects of gender difference in trauma therapy:

*Interviewer: How did you find it talking to Duane and this whole process?*

*Tamara: Sometimes it was a little uncomfortable, I guess. Talking about my experiences with a man.*
Here Tamara spoke about her experience of talking to a therapist of the opposite sex about rape, which is an intimate and traumatic experience. On further questioning, Tamara continued:

*Interviewer:* What made it uncomfortable if you do not mind me asking?

*Tamara:* I did not know how much detail to go into. I think that is what made it uncomfortable.

...

*Interviewer:* Did you feel...safe?

*Tamara:* Yeah.

This extract highlights the subtle complexities of gender difference in trauma therapy, especially sexual trauma, but also practical considerations which can occur in the case of therapist and participant as different genders. The concept of “appropriate” disclosure between male and female in therapy requires open clarification and the establishment of appropriateness and a level of comfort for the participant. Tamara’s experience highlights the important subtle aspects which require attention. Even so, Tamara had a sense of safety, irrespective of not having clarity regarding how to disclose sensitive experiences. Moreover, the effect of gender difference in trauma therapy for sexual violence can have unforeseen challenges and opportunities. In the case of Olivia, she reported:

*Olivia:* I think, well, uhm, strange for me is that uhm, Duane and the guy who raped me actually look very similar...

*Interviewer:* Wow...

*Olivia:* But, uhm, I never felt unsafe, like you understand?
Olivia’s reflection reveals an encounter which holds great significance for gender differences in trauma therapy. The effect of such an observation could have been challenging for Olivia. As the therapist, I aimed to create a safe and trusting therapeutic engagement to allow trauma survivors to process trauma experiences. Olivia’s unexpected encounter with a therapist who had some resemblance to the perpetrator presented a certain challenge but also an opportunity for a corrective experience.

Olivia reported feeling “safe” in treatment which provided her an opportunity for a corrective experience with a therapist who to some extent, and only based on physical appearance, could have evoked difficult emotions and thoughts for Olivia. She chose to engage with this anomalous encounter of exposure constructively, stating: “...I think because I made that conscious divide between ‘he’s not him’”. Olivia chose to adopt a positive and realistic approach, and this allowed her to openly engage in treatment and to cope with the psychological distress of her trauma.

In addition, and more importantly, gender differences did not detract from the meaning participants derived from the intervention. Participants’ reflection on the engagement with the therapist focused on the nature and quality of the interaction. For example, Thandi reported: “he was engaged. It was not just I’m listening to a story because I’m writing a paper, or I have to capture results. It didn’t even feel like I was in a clinical trial”. Thandi’s experiences are suggestive of a therapeutic alliance in treatment. The importance of being attentive, interested, and genuine in therapy is also reflected in Bongi’s experience of therapy. She reported that she felt she made a “friend because I was able to tell him, ‘I dread coming here and I do not like it’. And he would just laugh about it and say, ‘Well, I’m thankful you’re here.’”. These quotes reflect a therapeutic alliance and a genuineness between the participants and the therapist regardless of the difference in gender.
and the difficulty of treatment. Furthermore, here Farren reflected on how she experienced the gender difference:

...at first I thought it would bother me, but then after like our first, I think it was after our second session, I realised that I was actually quite comfortable in that space, and that I didn’t feel like I normally would which is...intimidated and on guard, or you know. So, it was always, always a very comfortable, very open space to be in. And I think that, his approach, his tone, body language boundaries being maintained within the space was very helpful in me understanding that this is a safe space.

Farren’s reflection illustrates her initial uncertainty and how she became comfortable in treatment. For her, the experience of the therapist assisted her in feeling safe and comfortable during the intervention. Her willingness to engage allowed her to experience safety and the ability to be open and reflective, irrespective of the gender difference. The experience of gender in trauma therapy did not have an adverse effect on the participants (dropout or lack of trust), yet this theme illustrates some of the surreptitious challenges that can be encountered regarding gender in trauma therapy.

9.9 Superordinate theme 2: Adapting to PE

In this superordinate theme I describe how participants experienced PE as a trauma therapy for PTSD. Participants compared PE to their previous experiences of psychotherapy for a common mental disorder (e.g., depression). Participants commented on the structure and direct nature of PE, which gave them a clear understanding and the desired outcome of the intervention. Participants also reflected on their experience of exposure procedures in therapy and how they became aware of their growth. Three themes were identified, namely, (a) PE
structure: “all my issues”, and (b) exposure: “are we going to deal with my issues here?”,
and (c) noticing a change: “dealing with my issues”.

9.9.1 PE structure: “all my issues”

Tumi, a 2nd year journalism student, had a history of depression and anxiety. Her experience of PE was markedly different compared to earlier experiences of treatment: “I think I appreciated having that structure because the fact that there was a goal to get to, and that we would get to the goal was very helpful”. Tumi’s reflection emphasises her appreciation of knowing what the treatment entailed. Tumi also emphasises how helpful it was to know, or have an idea of, what the intended outcome of treatment was.

Thandi, a 24-year-old pharmacy student, spoke about how her previous therapy experiences had a broad and unstructured approach, which she appreciated but felt that this lacked clarity and a clear goal. Thandi stated that: “I think it tried to, but it really didn’t...” give her enough direction in treatment. Thandi felt that her previous experiences of therapy were valuable, but that she never really knew what the actual objective of therapy was. The appreciation of knowing and understanding the intervention was reflected in the statements made by most participants.

Tamara, a 20-year-old drama student from KwaZulu-Natal, reported that “…I liked the fact that it focused on one thing rather than all my issues (laughs)”. Tamara’s reference to “all my issues” suggests that she wanted to focus on a specific issue. It might be expected that trauma survivors have additional stressors, but to have had a specific focus on the primary problem was helpful for Tamara. A structured approach might also mitigate feelings of anxiety and might provide the necessary support and emotional containment to work on a specific stressor. Moreover, Olivia reported that in addition to the set structure of PE, she
could still reflect on what had happened during the week since her last session. Olivia felt that the structured approach had some flexibility. She stated:

*he was always, like uhm, ‘so how was your day, how was your week, how are you feeling?’ And then I would like to explain this and this and this is happening and then we would go into like the formal therapy.*

Olivia’s reflection indicates that even within a manualised and structured treatment, she had the opportunity to reflect on associated experiences or everyday matters related to her central difficulty of sexual trauma. Overall, participants reported to have appreciated the clarity and goal directed approach of PE.

### 9.9.2 Exposure: “are we really going to deal with my issues here?”

Participants reflected on how they experienced exposure procedures such as in vivo and imaginal exposure. For most, exposure was initially, and sometimes throughout treatment, a challenging experience. Tumi, who engaged in an in vivo activity, initially felt overwhelmed but managed to complete the task. She stated that, “*it was much, much easier, like the walk itself, there wasn’t any like panic attacks, I was hyper aware, but I wasn’t…it was still doable*”. Tumi’s description of her in vivo activity illustrates her initial distress but eventual habituation. The use of words such as “*much easier*” indicate some initial fear towards exposure. Yet completing the task provided her with a different experience and insight related to her perceptions of exposure and her ability to engage with feared situations related to her trauma.

All participants had to adapt to engaging in exposure, which proved to be a challenge for all participants with varying degrees of intensity. For example, Thandi reflected on how surprised she was when she realised that she had to engage with trauma memories she feared
Thandi stated: “In my head, when he was first explaining, I kept thinking, ‘Are we really going to deal with my issue here?’” For Thandi, direct engagement with her trauma memory seemed somewhat unrealistic:

As we went through the steps and the questions and me recounting and what he called in vivo, and just like... going head-on and saying, ‘okay this is what it is, let’s talk about it, let’s now confront certain things’, it changed my- my initial outlook.

The extract highlights Thandi’s initial nervousness and disbelief in what she was expected to do in therapy, which was to directly engage with her trauma memory by means of in vivo and imaginal exposure. Thandi’s initial apprehension might suggest that trauma survivors enter therapy with some degree of ambivalence to engage in their psychological distress. Thandi’s internal dialogue (“are we really going to deal with my issues here?”) provides a vivid illustration of her initial disbelief. She refers to how PE was explained to her and this allowed her to understand what was expected and how exposure was to be conducted (“I was like ‘oh, I get it. I get it’”). Her experience of being informed about PE and the rationale for exposure appeared to have made the process more purposeful and tolerable.

Even so, engaging in exposure resulted in participants experiencing wavering moments of commitment to PE and a desire to disengage from therapy. Exposure was a challenging process for all participants. Farren, a 20-year-old psychology student, engaged in imaginal exposure but felt overwhelmed thinking about her experience of sexual assault as a child. She stated that she has processed certain parts of her trauma on her own. Yet when asked to directly recount the events, which were also fragmented, she found it too distressing and overwhelming. She sought out a different approach to recounting. Farren “found a way that made it work for me, so instead of just coming there and telling him, I went and then I wrote it down and then I came and read it and it was easier to talk”. Farren’s experience is
but one example of how challenging exposure can be, and that participants need to understand the purpose of exposure and feel psychologically safe enough to engage in exposure.

In addition to experiences of disbelief and finding alternative methods to engage in exposure, participants reported experiences of subtle resistance and avoidance. Tamara reported that whilst doing exposure it was unpleasant and she was not sure if she wanted to continue treatment:

_Interviewer: Did it ever feel like you were not keen to come back?_

_Tamara: A few times, yes. (laughs)...Yeah. Especially because we did a lot of recounting, the last couple of sessions it felt like ‘ugh, I’m just talking about the same thing over and over again._

Tamara found it frustrating to repeatedly talk about the trauma in several sessions. Tamara felt the recounting was unpleasant at certain times (“In the moment it’s not nice”). Tamara’s honest description reflects what most participants probably experienced, which is that exposure can be an unpleasant experience. However, Tamara later realised why she had to recount her trauma and how it facilitated her recovery. As she stated, “when I look at it in retrospect it makes sense”. Similarly, Bongi, engaged in an in vivo activity, which was challenging but also rewarding:

_It was hard. I could not get my arms inside the jacket or put it over my shoulders for I think three minutes. I was like okay; we will get the arms in tomorrow. We will put it away and yeah. Eventually [I] got to wear the jacket and it felt good._

Her experience illustrates that participants had to be courageous and committed to engage in exposure. Bongi’s experience with her jacket also demonstrates that participants
require some time and encouragement in PE. The difficulty of exposure therapy may impact participants in several ways, which may have led participants to feel overwhelmed, frustrated, and a need to disengage. This may be due to the increased levels of distress associated with exposure. Yet, participants, amidst the difficulty, also reported to have gained insight and symptom relief because of exposure procedures.

9.9.3 Noticing change: “I am actually dealing with things”

In this theme I describe participants’ experience of growth at the end of the intervention. Participants reported to have benefitted in various ways, for example, Tamara reflected on how she progressed from the beginning of treatment to the end. Tamara had to adjust to the process of PE, as she reported that “when we first began, I didn’t think it made very much sense, but now that I look back on the entire process and the amount of progress”. Tamara had to overcome her tendency to avoid and engage with the difficulty of her experiences. Tamara reported: “I was able to... express myself in a way that I didn’t at the beginning. So, at the beginning I was afraid to say certain words. And now I feel like I can... say some things”. Only in retrospect did Tamara realise how she gained from the entire experience. Tamara’s ability to articulate certain experiences she could not before demonstrates her progress and personal insight. Tamara’s account reflects a significant aspect of traumatic stress, and that is to be able to talk about that which one has feared. Bongi spoke about how treatment changed her outlook on life and that she is continuously attempting to integrate her trauma as part of who she is:

Well, it forced me to deal with what I did not want to, and I can safely say that what had happened does not have...I do not want to say it does not have a hold on me anymore, but it does not have as much hold on me as it did. Sadly, [it is] part of who I am now.
Bongi describes how she had to engage with the difficulty of her trauma, and this is seen in the words: “it forced me to deal with what I didn’t want to”. She can now live her life without the fear she experienced before treatment. The aim of treatment was not to forget about the sexual assault she survived, but for her not to be haunted by the experience. According to Bongi, she is now able to live a more “positive” life toward the future.

Relatedly, Tamara highlighted an important aspect about her experience; she became aware of her own progress during the intervention:

*Interviewer*: What made you come back?

*Tamara*: I noticed changes, I noticed differences. I thought, it is helping. So, let me just come back.

*Interviewer*: Do you mind if I ask what changes you noticed?

*Tamara*: I am dealing with things. I am not just repressing them and expecting them to go away I am not avoiding the emotions that I felt in those situations and what I feel thinking back to what happened. I am thinking about it and engaging with it and, trying to...understand how to move on and, continue.

Importantly, Tamara noticed that she stopped avoiding her trauma-related fears, and this proved to be more beneficial compared to dropping out of treatment. Tamara’s experience also highlights how participants might need to regulate the discomfort during treatment. If this is done, participants might gradually experiences increments of progress during and or after treatment. Tamara’s insights indicate that she had engaged in a different way of processing her trauma. Her awareness of her progress compelled her to continue engaging in exposure which facilitated her recovery.
Farren who was sexually assaulted at age six, and again at age 12, reported that PE “was a very different way of doing it [therapy] and way of approaching it which I was open to. But I had not anticipated exactly how revealing it would be”. PE was a new way of thinking and engaging with her experiences of trauma. This resulted in new insights:

I have a better understanding of where I am as an individual and the different ways that I need to move forward, but at the same time, I’ve realised just how much it [trauma] affects every decision that I make.

Farren came to realise the extent of the impact trauma has had on her life. She gained the insight that because of her traumatic experiences, her life was still directed by these traumatic experiences. Yet to be able to progress, it is not enough to simply attend sessions, but participants were required to engage and commit to the entire process. Participants stated that a genuine commitment and engagement to treatment was necessary.

Thandi stated that PE might not work for every person due to various reasons. Yet to achieve some level of success, participants, like Thandi, allowed herself to be helped. Thandi had the tendency to distance herself from support and would not know how to accept help from others. However, she decided to be open to the experience of the intervention and committed to the process of the treatment. She realised “*that any good programme can be put in place... But if someone is not like allowing themselves to fully engage in something, then it’s never going to happen...*”.

Thandi highlights the active and reciprocal nature of PE. These factors require some level of congruence between the intervention and the client. For example, most participants had some extent of feeling overwhelmed by exposure or frustrated by the structure of PE. Yet if there is a genuine need for help, as in the case of Thandi, she realised that she had to allow herself to fully engage in treatment, as she stated:
Like the first session I really did not want to be there, but I realised I needed to be there. Me needing to be there outweighed me not wanting to be there. So, I sat, and I was honest, and I was as open as I could be, because I realised the end goal.

Thandi’s decision to commit to treatment enabled her to engage with the difficult aspects of her trauma. Her decision to go against her tendency of avoidance provided her the opportunity to process her experiences of trauma.

9.10 Discussion

Phase 3 explored how trauma survivors experienced and made sense of receiving PE as a trauma therapy. The discussion presents an integration of the findings. Literature on trauma survivors receiving PE for PTSD is primarily quantitative in nature and has focused on correlates related to dropout rates (e.g., Fenger, Mortensen, Poulsen, & Lau, 2011; Lewis et al., 2020). Qualitative studies on the experiences of trauma survivors receiving PE for PTSD, has mainly used military veterans and focused on reasons for dropout and barriers to engage in trauma-focused services for PTSD (e.g., Hundt et al., 2018). The findings of the present phase of the study provides additional evidence to the dearth of information in the area of trauma research, but also provides insights from a non-military sample from a non-Western context on how participants experienced PE for PTSD in a South African context.

The superordinate theme of implementation of PE highlighted issues regarding the challenges encountered in the implementation process of a manualised trauma treatment. For example, Tumi appreciated the benefit of a focused treatment, but also reported to have a greater need for a longer-term and a broader therapeutic engagement. Tumi admitted that she had additional difficulties that required psychological intervention. Tumi’s need to focus on her more longstanding psychological problems resulted in feelings of frustration during the
intervention. Foa et al. (2007) reported that PE is an appropriate treatment for persons with a clear diagnosis of PTSD (or severe enough symptoms) and a clear trauma memory, and that to remain focused on the treatment of PTSD is vital. Yet comorbid conditions and/or other life stressors need to be engaged tactfully and, if severe enough, require reassessment of the treatment.

The structure of PE was also an obstacle for some participants. Annelise’s early history of interpersonal trauma, sexual violence, and her need to obtain a “cure” and an “answer” to resolve her interpersonal trauma with her father resulted in experiences of frustration towards PE and the therapist. Although this was not formerly assessed in the study but based on the extent of Annelise’s frustration with the treatment and criticism towards PE and the therapist, the influence of comorbid conditions such as a personality disorder (PD) could have possibly contributed to her experience of treatment. Hembree et al. (2004) found that PE can ameliorate PTSD in trauma survivors with a personality disorder, but that those without a personality disorder have a better end-state functioning compared to those with a personality disorder. In addition, it can be argued that Annelise had severe levels of avoidance and wanted to resolve her suffering, but without the necessary engagement.

In the theme of room for improvement, participants also provided critical feedback regarding the therapist. Most noticeable was Tamara’s need for reassurance from the therapist. Tamara’s experience provides valuable feedback, which might never have been known unless it was asked for. The input from participants provides a feedback loop that feeds into the development of not only the treatment but the therapist. The need for therapist feedback in real-world clinical settings is part of a larger process of growing evidence-based psychological interventions in everyday practice (Angus et al., 2010). Farren also commented on her need for more reflective engagement during the intervention. Farren’s experience could allude to the limited emotional processing conducted by the therapist and the limited
number of sessions of the intervention. Again, the feedback provides an opportunity to better implement PE in a South African context.

The theme of gender in therapy provided valuable insights on how an all-female sample experienced receiving therapy from a male therapist. Literature on gender matching in psychotherapy for PTSD is sparse, but notions of personal characteristic matching has existed for several decades (Festinger, 1954; Shiner et al., 2017). Shiner et al. (2017) found that gender-match in psychotherapy between female trauma survivors and female therapist had no positive predictor for treatment retention (Shiner et al., 2017). In addition, male therapist to male patient matching was found to have a negative correlation and that female trauma survivors expressed a higher level of preference and were also found to be more open to disclose to female mental health professionals, but that it did not necessarily warrant good psychotherapy retention (Shiner et al., 2017).

Some of the participants expressed a preference for a female. For example, Olivia and Tamara stated that talking to a male about their experiences of rape proved to be uncomfortable at first, and Tamara did not know what the appropriate level of disclosure was. For Olivia, her encounter with a therapist who had a physical resemblance to her rapist, is considered an anomaly but still a necessary consideration for trauma therapy. For example, the issues of gender difference in trauma therapy, especially sexual trauma, require some open discussion at the start of treatment. Even so, it would appear that gender preferences and peculiarities were mitigated by therapist characteristics and treatment effect. Nevertheless, the aspect of gender matching in trauma therapy would benefit from further investigation into the more subtle experiences reported from this present study.

In addition, participants also reported having experienced the therapist as warm, genuine, and empathic in treatment. Participants also reported having had a sense of safety in treatment, and this enabled them to engage in and complete treatment. Irrespective of gender
difference, the ability to establish a therapeutic alliance with participants is implied in the accounts of the participants. Literature on the implementation of PE emphasises the importance of the therapeutic alliance as a foundational component for any successful treatment (Hembree et al., 2003; Zoellner et al., 2011).

For example, a misconception of exposure therapies is that they are more technique-driven and are devoid of therapeutic factors such as empathy, trust, and safety (Zoellner et al., 2011). Case in point, Bongi reported that she felt she could be honest with the therapist and even let him know that she dreaded coming to therapy but that she also felt supported throughout the treatment process. Farren and Thandi reported a sense of safety, and even Olivia felt safe in treatment, despite having observed some physical resemblance between the therapist and her rapist.

The superordinate theme *adapting to PE*, highlighted several aspects of how participants managed to engage with the difficulties of traumatic stress and the process of PE. Participants expressed an appreciation for the structured and focused approach of PE. The comparison of PE to previous experiences of open-ended and unstructured therapy highlighted how participants appreciated and benefitted from being informed about the nature and objectives of therapy. Research on treatment retention and dropout rates in psychotherapy found that non-structured therapies, among others, had a higher dropout rate compared to manualised treatments (Fenger et al., 2011; Hundt et al., 2018).

As anticipated, participants experienced exposure procedures as unpleasant and overwhelming. In the theme of *exposure*: “*are we really going to deal with my issues here*”, participants had wavering experiences of commitment and the desire to drop out of treatment. Exposure appeared to be a primary reason for dropout, yet participants reported that they had started experiencing symptom reduction, therefore, they opted to complete treatment. Avoidance and increased distress can impede effective treatment of a trauma memory
(Zoellner et al., 2011). Literature on symptom exacerbation in exposure therapy reports that participants experience transitory symptom increase at the start of exposure, and subsequent stabilisation and decrease in distress as treatment continues (Foa et al., 2002; Larsen et al., 2016).

Lastly, in the theme of noticing change: “I’m actually dealing with things”, found that participants realised they were starting to benefit from PE. It is suggested that participants, first, encounter the difficulty of exposure, then, experience the benefit of habituation across sessions (Foa & Kozak, 1986). This finding is supported by Foa et al. (2002) and Larsen et al. (2016) who found that some participants experience transitory levels of distress during the initial phase of imaginal exposure, but this usually decreases as habituation occurs and symptom relief is reported. Overall, participants reported that they had engaged with the difficult aspects of their traumatic experiences. Participants had gained new insights regarding their experiences of trauma. Zoellner et al. (2011) stated that part of PE is to get trauma survivors to move away from the past and to live towards the future.

9.11 Reflexivity

Reflexivity in qualitative and mixed method research is a necessary process to produce quality research (Lazard & Mcavoy, 2020). The implementation of reflexivity in this phase of the study, and the broader research project, was not done to only offset subjective biases, but also as an opportunity to critically engage with the qualitative nature of phase 3 (Finlay, 2002; Gough, 2017; Lazard & Mcavoy, 2020). Given my professional participation as therapist and researcher, it is necessary to engage in a reflexive process on my experience as a clinical researcher.

Engaging in a reflexive process affirms that, I, the researcher, was involved in the research process, part of the context and contributed to the epistemic process (Lazard &
Mcavoy, 2020). Goldspink and Engward (2019) describe the use of reflexivity as “an attitude, a deliberate mechanism to bring forward a thoughtful, considered, and conscious attentiveness of researchers in relation to their presence in research practice” (p. 292). I adopted this attitude to be thoughtful and conscious of my presence and how I experienced some of the significant aspects related to this phase.

First, to have read and analysed the textual data of the participants was both rewarding and insightful. To learn how participants benefited from PE gave me a sense of success as a researcher. The textual data also gave me insight into how the participants experienced me as a therapist. As a researcher and therapist in the field of psychotraumatology and evidence-based psychological interventions, I was appreciative and humbled to learn about how participants experienced me as warm and supportive during treatment. I also appreciated the honest and critical feedback pertaining to PE and how they experienced my approach of implementation. Yet I would also be inauthentic to not acknowledge my experiences of anxiety and some disappointment related to how some participants experienced treatment and myself as the therapist.

For example, Farren pointed out that she would have appreciated more emotional processing during the intervention. After some reflection, I realised that our (therapist and client) experiences and needs are different, and that client feedback to a therapist might always have a level of surprise, but that it is an opportunity to enhance treatment process and outcomes (Angus et al., 2010).

I found it challenging to process the accounts of Olivia and Tamara. Olivia’s statement that I resembled the person who had raped her was unexpected, and something I would never have known. My initial reaction was that of shock and disbelief. I also felt concerned that I might have unknowingly caused her some level of distress. On an intellectual level I knew that such an arbitrary event could occur, but my affective experience
of the account resulted in feeling surprised and somewhat ashamed. My irrational sense of shame was linked to the idea that I could have resembled a person who had committed such a heinous and immoral crime. Again, cognitively I knew that my initial thoughts were irrational, but I had to reflect on how it affected me.

Similarly, Tamara’s experience of feeling unsupported during a specific session left me feeling inadequate as a therapist. One of the fundamental aspects of psychotherapy is to provide support and to create a space of acceptance and empathy. My reaction to learning about Tamara’s experience was difficult to process as I felt that I had failed her as a therapist. Again, as in the case of Olivia, I realised that I am not a perfect therapist. I realised that the feedback she gave must be seen as an opportunity to grow as a clinician and a researcher.

The difference in gender between myself and the participants highlighted crucial considerations. Albeit that gender difference does not predict treatment retention, there are important considerations to be aware of as a therapist and researcher. Notably, I now know that talking about the difference in gender in treatment, especially sexual trauma, can allay some fears and misconceptions such as disclosure of sensitive material.

Lastly, to have been in the role of clinician-researcher gave me a unique and privileged position to observe as well as participate in the research process. I have not only gained new insights from a research perspective, but also as therapist and as a person regarding my work in the treatment of traumatic stress.

9.12 Chapter summary

This chapter presented the findings of South African trauma survivors who received PE for PTSD. Noticeable findings were that of how they experienced a structured treatment for PTSD. A second finding commented on the obstacles in PE and how the therapist implemented PE. Third, participant reflections on exposure highlighted the difficulty they
experienced. Participants also reported experiences of personal growth and how they benefitted from treatment.

Lastly, the role of gender difference, especially in sexual trauma, provided significant insights in trauma therapy. Participants provided positive but also critical feedback related to their individual experiences of PE. These findings provide guidance in how PE can be implemented in a South African context.
Chapter 10

Limitations, Implications, & Conclusion

10.1 Summary

The high prevalence of PTSD is a global mental health concern, especially in LMICs with limited access to evidence-based trauma-focused treatments (Koenen et al., 2017). The World Health Organization has recognised empirically supported psychological treatments (ESTs) for CMDs as a first-line treatment. Therefore, the dissemination and implementation (D&I) of ESTs such as PE for the amelioration of PTSD is imperative, especially in LMICs such as South Africa (Singla et al., 2017).

Yet complex challenges such as poverty, limited trained professionals, and implementing TFTs in a context of ongoing adversity continue to impede implementation strategies of ESTs for PTSD in LMICs. The present study used a mixed method design to investigate and explore the broad aim, which was to implement a brief PE as an empirically supported trauma therapy in a South African context, and to explore whether PE is a feasible and acceptable trauma therapy for persons in South Africa. To this end, the study stated three aims.

10.1.1 Phase 1

The first aim was to explore the experiences and perspectives of trauma counsellors treating traumatic stress at a primary healthcare level and explore their attitudes and knowledge toward the use of ESTs such as PE in South Africa. During this phase of the project, TA was the qualitative method used to explore the lived experiences of the counsellors, and how they made sense of their experiences as counsellors treating persons with PTSD from low-resource communities, and what their perceptions were towards the
utility of TFTs such as PE in a South African context. Using an interview schedule, eighteen counsellors (n = 18) participated in semi-structured individual interviews across four community counselling centres located in the WC and EC of South Africa.

The qualitative findings produced eight themes that were grouped under three superordinate themes. The superordinate themes were working as a counsellor, which consisted of the following themes: encountering trauma narratives, social support and resilience, treatments for trauma, and a collective approach. The second superordinate theme was trauma in the social context, which consisted of: helplessness and social factors. The final superordinate theme was experiences of growth, which included: helping others heal and empowerment.

Key findings of this phase supported existing literature of the psychological risks of working as a counsellor in the field of traumatic stress. Counsellors felt vulnerable to developing vicarious trauma and burnout. Yet, counsellors also expressed an intrinsic desire to provide support to their respective communities. Counsellors found organisational support to be an invaluable resource to cope with the pressures of their work. Counsellors had limited training and or exposure to empirically supportive trauma therapies. As a result, treatment implemented by counsellors were based on their educational training or the organisational resources and/or an ideological position (i.e., feminist approach) towards how trauma should be treated. Counsellors were doubtful about the feasibility of structured and manualised ESTs in low-resources communities characterised by issues of poverty and ongoing adversity.

In addition, phase 1 highlighted the mediating effects of working as a trauma counsellor in low-resource communities. Trauma counsellors stated that traumatic stress was systemically embedded, whereby the prevalence of PTSD is perpetuated by contextual issues such as poverty and inadequate social services. Considering the first aim of the study, counsellors’ lived experiences were characterised by carrying a double burden of work
managing the psychological risk of trauma-focused work and navigating the systemic
challenges of working in a context of ongoing adversity.

10.1.2 Phase 2

The second aim of the study investigated the effectiveness of brief PE therapy for
treatment of PTSD at two community counselling centres in the WC and EC of South Africa.
The brief PE intervention constituted the quantitative phase of the study. Using a single case
experimental design, a total sample of 12 participants started a 6-session intervention and
only nine completed the intervention. The phase had four data time points, namely, baseline,
intervention, post-intervention, and three-month follow-up. The clinical measures used were
the post-traumatic symptom scale interview for DSM-5 (PSSI-5), the post-traumatic stress
disorder checklist for DSM-5 (PCL-5), the Beck Depression Inventory second edition (BDI-
II), and the Beck Anxiety Inventory (BAI).

Based on visual inspection, most participants had downward trends with a negative
diagnosis of PTSD (78%) and minimal symptoms of depression (88%), and about half of the
sample had minimal to moderate symptoms of anxiety (55%) at the end of the study. In
addition to visual inspection, the treatment effect of brief PE for PTSD, depression, and
anxiety were also found to be statistically significant (p < = 0.01) from baseline to post-
intervention, with huge to large effect sizes across all the outcomes from baseline to post-
intervention. On average participants remained stable from post-intervention to three-month
follow-up.

Considering the second aim of the study, the results of the brief PE intervention reject
the null hypothesis, and the research hypothesis has not been falsified, which is that trauma
survivors who complete six sessions of brief PE will have reduced symptoms of PTSD and
maintain their symptom reductions at three-month follow-up.
10.1.3 Phase 3

The third aim of the study was to explore the acceptability of PE in a South African context, which was to explore how trauma clients who present with symptoms of traumatic stress experience a brief prolonged exposure treatment for PTSD. Similar to phase 1, TA was used as the qualitative method. An interview schedule was used to interview at least seven participants who completed the brief PE intervention. The findings of phase 3 produced a total of six themes grouped under two superordinate themes that highlighted the experiences of persons receiving PE as a trauma therapy at a community counselling centre.

The superordinate theme implementation of PE consisted of the following: room for improvement: “it’s nice to hear that it’s not your fault”, obstacles: “cure my problem”, and gender: “talking about my experiences with a man”. The second superordinate theme, adapting to PE, consisted of the following themes: PE structure: “all my issues”; exposure: “are we really going to deal with my issues here”, and noticing change: “I’m actually dealing with things”.

Overall, the last phase of the study highlighted that trauma clients found PE distressing at first, but soon managed to tolerate the experiences of exposure. Participants also appreciated the structure of PE as it provided a sense of focus in treatment. Elements such as the therapeutic alliance proved to be important in creating an experience of safety and support during treatment. Gender difference between the therapist and participants did not have deleterious effects, yet it appears valuable to reflect on the possible influences of gender differences in treatment to enhance the overall process.

Participants with more severe prolonged histories of childhood trauma found treatment somewhat limiting and would have preferred a longer-term psychotherapy to explore comorbid conditions such as relational difficulties. Therefore, careful assessment of trauma history is necessary to ascertain how comorbid issues could affect the client
experience of PE. Considering the aim of phase 3, PE was found to be an acceptable treatment for most persons with PTSD as participants candidly expressed their initial challenges with exposure, but also how they eventually experienced habituation which alleviated their symptoms of PTSD.

10.2 Limitations of the study

First, the mixed method incorporated idiographic research designs (single case experimental design and thematic analysis) which emphasised the value of an idiographic approach over the large-scale nomothetic designs. Yet, it should not be assumed that the idiographic is devoid of the general, as idiographic research can provide valuable insights to help better understand the functioning of the nomothetic (Barlow & Nock, 2009).

The use of small samples across all three phases limits the external validity of the present study. The single case experimental design in phase 2 is also limited in the absence of participant randomisation and a control group. Furthermore, Norcross and Wampold (2019) also highlight the influence of clinician expertise, client preference and characteristics, and cultural contexts as variables that could influence treatment outcome. Yet the focus of the study was to accrue preliminary evidence of the feasibility of disseminating and implementing a brief PE treatment in a real-world clinical setting. Nevertheless, careful interpretation of the intervention results is necessary.

Most of the participants were also enrolled at a university. The intervention sample was also homogenous as only female participants participated and completed treatment. The use of a single therapist also limits the generalisability of the implementation of PE to other therapists in the same context.

Second, the findings of the trauma counsellors are based on their individual lived experiences which might, again, limit the generalisability of the findings of phase 1. The
counsellors are also only based in the EC and WC, which limits extrapolating these findings to trauma counsellors working in other parts of South Africa. In addition, the varying levels of education, training, and work experience of the counsellors could also have created some variability regarding the experiences of counsellors. Third, the findings of phase 3 are also limited due to the sample size, location, participant characteristics, and sex of the sample. Therefore, the findings of phase 3 might not be reflective of persons with different levels of education and socio-economic status.

Considering the current insights, the following changes to the present study would be considered if the study were to be conducted again. First, the intervention length would have been more flexible to allow for a minimum of six sessions and more if necessary. Second, the option of training counsellors to implement PE would have provided insights not only about their perceptions towards ESTs such as PE, but also on the trainability of PE among counsellors and how their experience of administering PE could have affected their perceptions of ESTs.

Third, in addition to the used assessment measures, a more comprehensive assessment measure (i.e., Structured Clinical-Interview for DSM-5) would have provided insights on the presence of comorbid conditions such as personality disorders. Lastly, given the socio-cultural context of South Africa, it would be valuable to explore cultural mediating factors in the treatment of trauma (Schnyder et al., 2015). The use of the Cultural Formulation Interview for DSM-5 could have provided insights regarding the role of culture in how participants understood traumatic stress, a diagnosis of PTSD, and PE as a TFT.

10.3 Value of the study

The present study contributes to the body of literature on D&I of ESTs for the treatment of PTSD in LMICs. The study highlights the processes and challenges germane to
implementing an EST for PTSD in a context characterised by ongoing adversity such as poverty and increased levels of trauma exposure. To my knowledge, the study is the first to adopt such a comprehensive and nuanced approach to investigating and exploring the effectiveness, acceptability, and overall feasibility of PE for adults with PTSD in South Africa at a primary care level.

Furthermore, it is argued that the study not only comments on the gap between science and practice, but also attempts to contribute to the epistemological and ontological debates between indigenous psychology and so-called Western mainstream psychology. For instance, the study not only investigated the treatment effect of a psychological intervention, which might be considered a mainstream psychology approach. The study also explored the socio-political and economic influences on the nature of traumatic stress and how such explorations could enhance the amelioration of PTSD in South Africa and similar LMICs.

As a result, and more importantly, the research has not merely contributed to the scholarly community on the treatment of PTSD in South Africa, but has also provided access to trauma-focused treatment to persons at a primary care level, allowed mental health practitioners to reflect on their experiences as trauma counsellors, and given trauma survivors an opportunity to reflect on how they experienced a TFT for PTSD.

10.4 Implications for training and education

To date, treatment of PTSD at a primary care level has been chequered and seldom based on a first line EST such as PE. A recommendation regarding this implication would be to engage educational institutions regarding their curriculum on teaching and training in traumatic stress, specifically, PTSD. For example, it would be useful to assess whether institutions such as universities and colleges base their training on the current available
evidence on the treatment of PTSD. A recommendation such as this could inform the nature of dissemination strategies in a South African context.

10.5 Public mental health policy

Counsellors reported that they found it challenging to provide trauma services when clients lived in communities with high levels of trauma exposure or abject poverty. Yet the study found that persons residing in a context of increased levels of trauma exposure and adversity could still benefit from PE. Therefore, further research is required on the trainability of counsellors at primary care level and to ascertain the effectiveness of PE for PTSD. Furthermore, given the comprehensive nature of the present study, it is recommended that preliminary engagement with relevant institutions such as Department of Health (DoH) and the Department of Social Development (DSD) be initiated to inform these stakeholders regarding accruing evidence towards the effective treatment of PTSD at a primary care level. In addition, it is advised that future research be conducted in partnership with the DoH and DSD.

10.6 Implications for research

In addition to conceptual research which explores the socio-political aspects of traumatic stress in the majority world, intervention research needs to be increased as the need to ameliorate mental disorders such as PTSD is imperative. As described in Chapter 1, South Africa has a chequered history of conducting intervention research which consists mainly of a case study methodology, which is different to a single case experimental design. It is recommended that idiographic intervention research such as single case experimental designs be used to facilitate a more rigorous intervention research at graduate and professional level.
In addition, Implementation Science (IS) research provides a platform for researchers to work collaboratively toward disseminating and implementation of evidence-based treatments in real-world settings. The present study demonstrates the value of intervention research and how it can contribute to the evidence on ameliorating PTSD in South Africa.

**10.7 Implications for clinical practice**

Research has found that the use of ESTs such as PE in real-world clinical practice remains limited (Becker et al., 2004). The present study also demonstrates from a practical point how a manualised exposure treatment was implemented and what the challenges were for the clinician and the intervention clients. In addition, the findings of the study recommend that the implementation of PE in South Africa, especially in low-resource contexts marked by adversity, appears feasible. Yet clinicians need to be mindful of the contextual influences on the outcome of treatment and enhance the resilience of clients faced with contextual challenges whilst in treatment for PTSD. For example, clinicians would have to work collaboratively with clients and implement continuous assessment on the progress of treatment.

**10.8 Conclusion**

The findings of the research has not only highlighted some of the challenges of treating PTSD in a low-resource setting, but also the potential positive outcomes if researchers and clinicians from the majority world implement and assess the effectiveness, acceptability, and overall feasibility of ESTs such as PE for PTSD in LMICs. The findings of the present study suggest that PE can reduce symptoms of PTSD at a primary care level, and that trauma survivors might have initial challenges regarding exposure but can still benefit from PE. Lastly, due to the challenges encountered in low-resource settings, the perceptions
of trauma counsellors toward the feasibility of ESTs such as PE for PTSD appeared to be varied. Therefore, attempts to disseminate and implement PE in a South African context need to be cognisant of the contextual challenges. Overall, the study found that PE appears to be a feasible treatment to disseminate and implement in a South African context for the treatment of PTSD among adults at a primary care level.

Fundamentally, the present study also serves as a foundation for further investigation into the dissemination and implementation of PE as a trauma therapy in South Africa and similar LMICs. The study bridges the gap between science and practice to enhance mental health services in a South African context. Yet the positive outcomes should not eclipse the challenges that were highlighted, but rather be used to advance innovative approaches to the dissemination and implementation of ESTs for PTSD in the majority world.

Lastly, I want to echo the sentiments of a participant who poignantly claimed that “with trauma there’s a possibility of recovery...it felt like the person had more hope”. In reflecting on the history of progress in the assessment and treatment of PTSD, it becomes apparent why persons should be more confident about the possibility of recovery. The epistemological progress in the field of traumatic stress was not by chance, but was made possible using reason, science, and an unwavering humanistic attitude toward alleviating the suffering of those who have survived traumatic experiences.
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Appendices

Appendix A

Stellenbosch University Ethical Approval

NOTICE OF APPROVAL
REC Humanities New Application Form

7 September 2017
Project number: REC-2017-0188
Project Title: Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A pilot study

Dear Mr Duane Booyzen

Your response to stipulations submitted on 31 August 2017 was reviewed and approved by the REC: Humanities.

Please note the following about your approved submission:

Ethics approval period: 30 August 2017 - 29 August 2018

Please note the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (REC-2017-0188) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

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NOTICE OF APPROVAL

REC Humanities Progress Final report form

16 August 2018
Project number: 0188
Project Title: Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A Pilot Study

Dear Mr Diante Booysen

Your REC Humanities Progress report form submitted on 7 August 2018 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

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GENERAL COMMENTS:

The researcher is reminded to complete and submit an amendment once confirmation is received from the additional research sites. The candidate should submit to the REC: Humanities the request for permission letters sent to the two additional sites (Cape Town Rape Crisis Centre and Port Elizabeth Rape Crisis Centre). The signed permission letters from both additional sites should also be sent to the REC. The candidate should send through the consent forms to be used for the additional sites. The names of the Cape Town Rape Crisis Centre and Port Elizabeth Rape Crisis Centre should be outlined in the amended proposal.

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (0188) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

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If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.
Appendix B

Rhodes University Ethical Approval

5 March 2018

Duane Booyzen
d.booyzen@ru.ac.za

Dear Duane Booyzen,

Re: HUMAN SUBJECTS ETHICS APPLICATION
Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A Pilot Study
Reference number: 9633672
Submitted: 2/12/2018

This letter confirms that the above research proposal has been reviewed by the Rhodes University Ethical Standards Committee (RUESC) – Human Ethics (HE) sub-committee.

The committee decision is: Approved.
Please note the following:

Gatekeeper permission has been obtained.

Very clinical, objective language is used in both the advert and the informed consent letter. It is assumed that this would be mediated in conversation that is more informal, chatty and supportive.

The Client Screening document refers to living in Cape Town - it is assumed this will be changed for this portion of the project to ‘living in Makana municipality’ or similar?

Consider consulting a statistician to justify the minimum (12) and maximum (20) numbers of participants in the sample size in order to ensure the validity and reliability of the data.
Ethics approval is valid until 31 December 2018. An annual progress report is required in order to renew approval for the following year.

Please ensure that the ethical standards committee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes in investigators. Please also ensure that a brief report is submitted to the ethics committee on completion of the research. The purpose of this report is to indicate whether the research was conducted successfully, if any aspects could not be completed, or if any problems arose that the ethical standards committee should be aware of. If a thesis or dissertation arising from this research is submitted to the library’s electronic theses and dissertations (ETD) repository, please notify the committee of the date of submission and/or any reference or cataloguing number allocated.

Sincerely,

[Signature]

Prof Jo Dames
Chair: Human Ethics sub-committee, RUESC-HE

Note:

1. The ethics committee cannot grant retrospective ethics clearance.
Appendix C

Trauma Centre Gatekeeper Permission

Dear Mr BooySEN

Permission to conduct research at the Trauma Centre

I am delighted to inform you that permission is granted for you to utilise the organisation as a research site for the research entitled, ‘Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A pilot study.’

Yours Sincerely

Valdi Van Reenen-Le Roux
Executive Director

Below please find my endorsement:

I, Valdi Van Reenen-Le Roux, hereby give permission to Duane D. BooySEN to conduct research at the Trauma Centre.

Signature: ______________ Date: 6 June 2017

Witness Name & Surname: Janneris van der Meulen Date: 6 June 2017

Witness Signature: ______________

Building a Nation of Survivors

Board Members: Jemalak Rangannath (Chairperson), Mr Duncan Albertus (Treasurer), Mr Valdi Van Reenen-Le Roux (Executive Director) Professor Aabof Kagan, Dr Shadi Mantzi, Mr Guyne Philander, Father Weanglício Chishotes

Patrons: Ma Gaca Madel, The Most Reverend Desmond M Tutu, Justice Richard J Goldstone, The Most Reverend Njongzfeka Ndungane, Professor Leslie London, Mr. Fred Phawana
Appendix D

Rhodes University Registrar Gatekeeper Permission

Mr D Booyzen
32 Penny lane
HO de Villiers Street
BRACKENFELL
7560

24 January 2018

Dear Mr Booyzen

Name of research proposal: Implementing a brief trauma treatment programme for survivors of a trauma: a pilot study.

This serves to confirm that you have been granted permission to conduct your proposed research at Rhodes University as requested.

Yours sincerely

[Signature]
Dr Adèle Moody
REGISTRAR
Appendix E

Rhodes University Director of Student Affairs Permission

The message was sent with high importance.

This message is part of a thread conversation. Click here to view all related messages or open the original flagged message.

Dear [Name],

This serves to confirm that permission has been granted by the UCTAcademic & Student Affairs for the study to be conducted at the Rhodes University Counselling Centre.

Warm regards,

[Name]

Rhodes University Counselling Centre

*In context is uptake and learning student support systems that are environment which is inclusive and conducive to a healthy lifestyle, personal growth, development and academic success for our students.

This email and any attachments it may be sent or transmitted are intended only for the use of the individual(s) to whom it is addressed. If you are not the intended recipient of this email, you must not read, retain, distribute, copy, or share it in any way. Please contact the sender if you have received this email in error.
Appendix F

Rhodes University Acting Manager of Student Counselling Permission

Dear Mr Green,

Based on our meeting to discuss your proposed research and the permission granted by Dr Douglas and Mr Mroz, you are permitted to conduct your research at the Counselling Centre.

We look forward to working with you this year.

Kind regards,

Sarah Green
Acting Manager, Counselling Centre
041 502 7001

This email and any attachments thereof are confidential and can be regarded solely for the use of Mr Douglas. If you are not the intended recipient of this email, you must neither show nor disclose the content, nor copy or show it to anyone. Please contact the sender if you believe you have received this email in error.

From: Dr Christie Douglas (christie.douglas@ru.ac.za)
Sent: 6th December 2019 09:04 AM
To: hkm@sun.ac.za; mrozn@student.sun.ac.za
Cc: Sarah Green
Subject: Permission to Conduct Research at Student Counselling Centre
Importance: High
Appendix G

RCC Cape Town Permission Letter

22 January 2019

To: Stellenbosch University
   Department of Psychology
   Faculty of Arts and Social Sciences

Dear Sir/Madam

RE: Permission for Mr Duane Booyzen to conduct interviews with Rape Crisis Cape Town Trust’s counsellors.

This letter serves as confirmation that Rape Crisis Cape Town Trust, grants Mr Duane Booyzen permission to interview counsellors, currently providing services to rape survivors. The permission is granted to him in relation to his research project: Implementing a Brief Trauma Treatment Programme for Survivors of Traume – a Pilot Study.

Kind regards

Nazma Hendriks
Operations Manager
Rape Crisis Cape Town Trust
nazma@rapecrisis.org.za
021 684 1180
Appendix H

RCC Port Elizabeth Permission Letter

To: Rhodes University Ethical Standards Committee
P.O. Box 94
Grahamstown
6140
South Africa

10 August 2018

Dear Sir/Madam

Subject: Permission for Mr Duane Booyen to conduct interviews with the Port Elizabeth Rape Crisis Centre First Responder/Crisis Counsellors

This letter serves as confirmation that the Port Elizabeth Rape Crisis Centre Trust grants Mr Duane Booyen to interview at least 10 – 12 First Responders/Crisis counsellors currently providing services to rape survivors and intimate partner violence services under the organisation. The permission is granted to him in relation to his research project: Implementing a Brief Trauma Treatment Programme for Survivors of Trauma – A Pilot Study

Yours truly

Berenice Jacobs-Malgas (Director)
Appendix I

Written Informed Consent Form – Counsellor Version

Title: Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A Pilot Study.

You are asked to participate in a research study conducted by Duane D. Booyzen (MA Clinical Psychology), from the department of psychology at Stellenbosch University. The results of the study will contribute to a doctoral thesis, academic publication(s), and conference presentation(s).

You are invited to participate in this study because you work as a trauma counsellor at the Trauma Centre for Survivors of Violence and Torture and/or at the Rape Crisis Centre in Cape Town or in Port Elizabeth.

1. PURPOSE OF THE STUDY
The purpose of the study is to determine the acceptability of the Brief Trauma Treatment Programme (BTTP) as a psychological treatment for traumatic stress.

2. PROCEDURES
If you volunteer to participate in this study, I would ask you to do the following things:

You will be interviewed about your experience of working as a trauma counsellor, and your beliefs about trauma-focused treatments to reduce symptoms of traumatic stress.

Interview will be 60 – 90 minutes long.

3. POTENTIAL RISKS AND DISCOMORTS
The research obtained ethical clearance by the Stellenbosch University Human Research Ethics Committee. The study will prioritise the rights and dignity of all participants involved.

To safeguard and mitigate potential discomfort you may experience at any time during the study, the following guidelines will be adopted by all parties involved in the study.

You have the right to decline and/or exit the study at any time. Secondly, all counsellors who decide to opt out of the study will not be treated unfairly.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
You will have an opportunity to share your experiences of working as a trauma counsellor.
The study may inform public mental health policy on the use of first line treatments for PTSD at primary care level and NGO's, and promote the importance of evaluation and adoption of efficacious psychological treatments in South Africa for the treatment of trauma.

5. PAYMENT FOR PARTICIPATION
You will not receive payment for participating in the study.

6. CONFIDENTIALITY
Any information 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 counsellor. All paper documents will be safeguarded at the personal office of the principal researcher, and electronic data will be encrypted and stored on Dropbox storage. These storage spaces will have controlled access. The principal investigator and research supervisor will have access to the Dropbox stored data. You have the right to request a copy of the audio-recorded interview.

The results of the research will be prepared for 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 investigator may withdraw you from this research 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.

8. IDENTIFICATION OF INVESTIGATORS
If you have any questions or concerns about the research, please feel free to contact Duane D. Booyse (Principal investigator) on 0781676607/ duaned95@gmail.com or Prof Ashraf Kagge (Supervisor) on 0218085461/ akagge@sun.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 Ms Maléné Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
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].
Appendix J

Written Informed Consent Form – Client Version

Title: Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A Pilot Study.

You are asked to participate in a research study conducted by Duane D. Booyens (MA Clinical Psychology), from the department of psychology at Stellenbosch University. The results of the study will contribute to a doctoral thesis, 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 purpose of the study is to determine the acceptability of the Brief Trauma Treatment Programme (BTTP) at the Trauma Centre as a psychological treatment for traumatic stress.

2. PROCEDURES

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

Complete a brief screening questionnaire to determine if you meet the criteria to participate in the study. You will be assessed before the counselling begins, when you complete the counselling, and again after three months you have received counselling.

Attend six weekly sessions of 60 – 90min duration.

All counselling sessions will be video recorded to ensure that the clinical psychologist (principal investigator) adheres to the treatment guidelines of the BTTP treatment.

You will be invited to participate in an interview about your experience of the counselling. The session will be audio recorded, transcribed, and analysed.

3. POTENTIAL RISKS AND DISCOMFORTS

The research obtained ethical clearance by the Stellenbosch University Research Ethics Committee and 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, you will be allowed to continue treatment at the trauma centre based on your psychological functioning.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

You will receive six sessions of counselling, which is based on an effective psychological treatment for trauma. You will also have an opportunity to talk about how you experienced the counselling.

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 R30 will be given to all participants after each session.

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. These storage spaces will have controlled access. The principal investigator and research supervisor will have access to the Dropbox stored data.

Counselling sessions will be video recorded and interviews will be audio recorded, transcribed, and analysed. The principal investigator will oversee that these recordings 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. Booyzen), research supervisor (Prof Ashraf Kaejee). You have the right to listen or request a copy of the interview or video recordings.

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

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8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Duane D. Booyzen (Principal investigator) on 0816766607/ duanebooyzen@gmail.com or Prof Ashraf Kaejee (Supervisor) on 0218083461/ skaejee@sun.ac.za
Appendix K

Project Information Sheet – Counsellor Version

STELLENBOSCH UNIVERSITY
COUNSELLOR INFORMATION SHEET

Title: Implementing a Brief Trauma Treatment Programme for Survivors of Trauma: A Pilot Study.

You are asked to participate in a research study conducted by Duane D. Booysen (MA Clinical Psychology), from the department of psychology at Stellenbosch University. The results of the study will contribute to a doctoral thesis, academic publication(s), and conference presentation(s).

You are invited to participate in this study because you work as a trauma counsellor at the Trauma Centre for Survivors of Violence and Torture and/or at the Rape Crisis Centre in Cape Town or in Port Elizabeth.

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Interview will be 60 – 90 minutes long.

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The research obtained ethical clearance by the Stellenbosch University Human Research Ethics Committee. The study will prioritise the rights and dignity of all participants involved.

To safeguard and mitigate potential discomfort you may experience at any time during the study, the following guidelines will be adopted by all parties involved in the study.

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Duane D. Booysen
Principal Investigator
Appendix L

Project Information Sheet – Client Version

STELLENBOSCH UNIVERSITY
CLIENT INFORMATION SHEET

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If you have any questions or concerns about the research, please feel free to contact Duane D. Booyse (Principal investigator) on 0781676607/ duaneb85@gmail.com or Prof Ashraf Kaege (Supervisor) on 0218083461 / akaege@sun.ac.za
Appendix M

Counsellor Interview Schedule

Interview Guide – Counsellor

<table>
<thead>
<tr>
<th>NAME OF INTERVIEWER:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF COUNSELLOR:</td>
<td></td>
</tr>
<tr>
<td>DATE OF INTERVIEW:</td>
<td></td>
</tr>
</tbody>
</table>

Counsellor Background:

1. How long have you been working as a Trauma Counsellor? [duration / various organizations/ only trauma or other MH areas]

2. What led you to work with survivors of trauma? [personal experience/ employment opportunity/ future direction]

3. Where did you train/ study to work as a trauma counsellor? [university/ college/ special training/ curriculum/ types of interventions/ do you feel prepared]

4. Describe your experience of working with trauma survivors in the Cape Town area? [difficulty/ personal meaning/ challenges/ how do you cope/ organizational support and development]

5. Describe the type(s) of trauma you have had to work with as a trauma counsellor? [explore the impact of trauma types on counsellor/ types of treatments]

6. How does the socio-economic context affect your work as a trauma counsellor? [poverty, unemployment, gangsterism/ social issues/ social stigma]
7. Given the multicultural context of South Africa, how does cultural difference affect your work as a trauma counsellor? [explore cultural nuances in counselling/client with different cultural backgrounds/and understanding of trauma]

8. Evidence-based interventions

Evidence-based interventions

8. Please describe how you do trauma-focused counselling? [theory/model/procedures/assessment/treatment plan]

9. Are you familiar with Prolonged Exposure Therapy for PTSD? [if not, explain PE and how it is used/provide background on PE/explore participants thoughts on PE/compare to supportive counselling]

10. Evidence-based interventions, i.e. PE, are manualised and structured interventions, please describe/state your opinion about using in PE as a counsellor in your organisation? [explore challenges/positives/requirements/uncertainty]

11. Do you have any final thoughts you’d like to share about the treatment of PTSD and the use of EBI’s such as PE?
Appendix N

Independent Research Assistant Contract

I, [NAME], agree to assist the primary investigator with this study by:

- Administer and score baseline, post-intervention and follow-up assessment measures
- Conduct semi-structured interviews
- Manage administrative tasks related to above-mentioned tasks

I agree to be available and contactable on a reasonable basis, and acknowledge that the PI has the right to terminate my services at any point during the research process.

I agree to maintain full confidentiality when performing these tasks.

Specifically, I agree to:

1. Keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g., disks, tapes, transcripts) with anyone other than the primary investigator (Duane D. Booysen);

2. Hold in strictest confidence the identification of any individual that may be revealed during performing the research tasks;

3. Not make copies of any raw data in any form or format (e.g., disks, tapes, transcripts), unless specifically requested to do so by the primary investigator;

4. Keep all raw data that contains identifying information in any form or format (e.g., disks, tapes, transcripts) secure while it is in my possession. This includes:
   - keeping all digitized raw data in computer password-protected files and other raw data in a locked file;
   - closing any computer programs and documents of the raw data when temporarily away from the computer;
   - permanently deleting any e-mail communication containing the data; and
   - using closed headphones if transcribing recordings;

5. Give, all raw data in any form or format (e.g., disks, tapes, transcripts) to the primary investigator when I have completed the research tasks;
6. Destroy all research information in any form or format that is not returnable to the primary investigator (e.g., information stored on my computer hard drive) upon completion of the research tasks.

Provide the following contact information for research assistant:

Printed name of research assistant: TONSAI ELVIE MUTEMBERZA

Address: 49 ROCHESTER ROAD, OBSERVATORY, CAPE TOWN

Telephone number: 063 190 2803

Signature of research assistant

Date 11-08-17

Printed name of principal investigator: Duane D. Booysen

Signature of principal investigator:

Date: 10 August 2017
Appendix O

Trauma Client Screening Tool

Client Screening Questionnaire

Name of Screener: ____________________________
Name of Prospective Participant: ____________________________
Date & Time: ____________________________
Referral Source: ____________________________

Please invite the prospective participant to complete the following brief questionnaire to be considered for participation in the Brief Trauma Treatment Programme research study. If the participant meets the criteria to participate, he/she must complete the PTSD Checklist for DSM-5 to screen for symptomology; this must only be done after the completion of the demographic questionnaire.

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Are you between the ages of 20 to 55 years old?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Can you speak English and/or Afrikaans?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Have you directly experienced or witnessed a traumatic event in your lifetime?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Do you live within the northern/southern suburbs/Cape Town CBD or in the Grahamstown area?</td>
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<tr>
<td><strong>Section B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Have you experienced hearing voices outside of your head/believe that you are in grave danger/people can hear your thoughts in last 4 weeks?</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td></td>
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<td>---</td>
<td>------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>6</td>
<td>Have you experienced symptoms of increased energy/ had a decreased need for sleep/ your thoughts or mind is racing in the last 4 weeks?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Are you experiencing current/on-going sexual or physical abuse with your partner?</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Have you ever had a traumatic brain injury? (been unconscious and in hospital due to a head injury)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Do you have a neurodevelopmental disorder? (Autism or ADHD)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Have you started using psychotropic medication in the last two months?</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Have you terminated psychotherapy for trauma in the last three months?</td>
<td></td>
</tr>
</tbody>
</table>

*If you have answered yes to all questions in section A and no to all questions in section B, please complete the PTSD Checklist for DSM-5 for the final screening. If you have not obtained the required answers as stated above, please speak to the available principal researcher or administrator for further assistance at the Trauma Centre.*
Appendix P

Example of Fidelity Rating Completed by Research Assistant

Therapist Adherence and Competence Rating Scale

Patient ID: [Redacted]  SESSION 1  Date: 23/04/2019

Therapist: Duane Bocuyen  Supervisor: [Redacted]

Rater: Pieter Bredenkamp  Date Ratings Completed: 13/11/2019

Part I: Therapy Elements
1. Therapist set an agenda including treatment overview and explaining research. [Yes/No]
2. Therapist presented an overview of the treatment program? (e.g. number of sessions, session length etc.) [Yes/No]
3. Therapist discussed factors that maintain post-trauma reactions: avoidance and negative, trauma-related thoughts and beliefs? [Yes/No]
4. Therapist described imaginal exposure? (helps digest and process information) [Yes/No]
5. Therapist described in vivo exposure? (helps recognize that avoided situations are not dangerous) [Yes/No]
6. Therapist presented rationale for breathing retraining? [Yes/No]
7. Therapist instructed client on breathing and coached through breathing in session? [Yes/No]
8. Therapist assigned homework? (Breathing retraining) [Yes/No]

Total number of Therapy Elements answered Yes = 8

Please rate overall therapist competence/adherence for this session:

<table>
<thead>
<tr>
<th>TE=0-4</th>
<th>TE= 5-6</th>
<th>TE=7</th>
<th>TE=8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
| Very poor | Barely Adequate | Good | Excellent

Any comments related to treatment:

"Client has difficulty designating a primary trauma. Two events are offered which are similar in terms of the victimization involved."

Stellenbosch University https://scholar.sun.ac.za
Appendix Q

Interview Schedule

Interview Guide – Client

<table>
<thead>
<tr>
<th>Name of Participant</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Interview</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Work status</td>
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<tr>
<td>Languages</td>
<td></td>
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<tr>
<td>Ethnicity</td>
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<tr>
<td>Age</td>
<td></td>
</tr>
</tbody>
</table>

Person/Contextual related questions:

1. Have you been in counselling or therapy before? (If yes, how does this process compare to a previous counselling experience? If no, what were your preconceived ideas about trauma counselling/therapy)

2. Based on your cultural and/or religious background, how did you experience the counselling process? (explore the cultural, social, gender difference between participant and counsellor)

3. What meaning did this process hold for you? In addition, how has this process of trauma counselling affected the broader areas your life? (socially, personally, occupationally)

Counselling process related questions:

4. The counselling had a specific focus (structured) for each session, how did you experience the structure/directive approach?

5. The counsellor asked that you practice or engage in tasks or activities (calm breathing) during and after/in-between sessions, how did you experience this? (explore the difficult of working outside therapy)
6. The counsellor spoke about some of the common reactions to trauma (psychoeducation) can you comment on this? Was it useful to know more about PTSD? (explore cultural/social/religious understandings which might be different/conflicting)

7. The counsellor asked that you think of Approaching Safe Situations (In Vivo) to expose yourself to situations between sessions. What was your experience of this activity? [explore general experience of exposure]

8. The counsellor asked that you recount/talk about the trauma during three sessions, how did you experience this during sessions? How did this impact on you after sessions?

9. How did you experience the process of the treatment? (Explore thoughts on dropping out? Difficulty? Anxious about coming to treatment?)

10. How did you experience the counsellor? Which attributes were most and least helpful?

11. Any final thoughts on your experience of this particular trauma-counselling programme? [What would clients say to future survivors about this treatment?]