Indicators of trauma in a single sand tray scene of a rural school youth

Karin Ayres

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Indicators of trauma in a single sand tray scene of a rural school youth

by

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Declaration of Originality

I, Karin Ayres, declare that the mini-dissertation, entitled: *Indicators of trauma in a single sand tray scene of a rural school youth*, which I hereby submit for the degree Masters in Educational Psychology at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

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Karin Ayres
November 2016

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Abstract

Indicators of trauma in a single sand tray scene of a rural school youth

by

Karin Ayres

Supervisor: Prof. Carien Lubbe-De Beer
Degree: M. Ed. (Educational Psychology)

The purpose of this study was to explore the ways in which a rural school youth indicates trauma in a single sand tray scene. An empirical study of limited extent, which was conducted from the interpretivistic paradigm and qualitative by nature, was undertaken. A clinical case study was utilised as research design and document analysis was employed as data collection method. The case record of a Grade 9 learner with a complex trauma history, who attended a secondary school in a low-resourced community in Mpumalanga, was selected as the principal participant in the study. Sandplay assessment, trauma indicators and rural youths were the main concepts guiding the study.

The findings of the empirical study were, firstly, that the ways a rural school youth indicated trauma in a single sand tray scene corresponded with trauma indications in Sandplay literature, of which, secondly, scenes appearing hostile, sexualised, bounded-off, rigid, obstructed or empty and devoid of life (e.g. people, vegetation) and scenery were examples. This reflected the universal dynamism of trauma. Another finding was that the utility of a single sand tray scene as a screening tool for trauma with a rural school youth was high and valuable as it identified different types of trauma and trauma-related suffering (symptoms).

Key words

- Cross-cultural assessment
- Sandplay assessment
- Trauma
- Indicators of trauma
- Rural youth
- Qualitative research

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CHAPTER 1
OVERVIEW OF THE STUDY

1.1 BACKGROUND OF THE STUDY

The purpose of this study is *to explore the ways in which a rural school youth indicates trauma in a single sand tray scene*. The research context for the study is a rural school community in a low-resourced area in Mpumalanga. The findings of the Mpumalanga Family Study (Makiwane, Makoae, Botsis, & Vawda, 2012), conducted by the Human Sciences Research Council (HSRC), portray rural communities as impoverished with limited economic opportunities for its inhabitants and inadequately developed infrastructure pertaining to water, sanitation, electricity, roads and transport as well as limited access to health care and social welfare services. Schools within these impoverished areas which regularly lack adequate numbers of educators and classrooms, recreational facilities, basic infrastructure (e.g. running water and sanitation) and services (e.g. learning materials and stationery) are also susceptible to school violence (Ncontsa & Shumba, 2013; Pahad & Graham, 2012). Teenage pregnancies which result in high school drop-out rates, food insecurity in poor families, substance abuse which increases interpersonal violence and the high burden of Acquired Immune Deficiency Syndrome (AIDS) and Tuberculosis mortalities are common social concerns (Houle, Clark, Gómez-Olivé, Kahn, & Tollman, 2014; Makiwane et al., 2012; Tibesigwa, Visser, & Twine, 2014). Numerous families rely on social grants for a stable income and are headed by grandparents or older siblings as parents are either deceased or one or both have migrated to urban areas for employment opportunities, placing the family unit and supervision of children at risk (Houle et al., 2014; Makiwane et al., 2012; Neves & du Toit, 2013). Clearly, the rural context embodies a significant part of the South African society where poverty-related stress due to limited resources (Cortina et al., 2016; Santiago, Wadsworth, & Stump, 2011) and psychological suffering as a result of the impending threat of violence and crime (Holliday, Clem, Woon, & Suris, 2014; Stevens, Eagle, Kaminer, & Higson-Smith, 2013) pose various challenges to Educational Psychologists with regard to providing adequate care and service delivery when traumatisation is ongoing.

This research study forms part of the existing Flourishing Learning Youth (FLY) project - a collaborative partnership formed in 2006 between researchers and students from the University of Pretoria and personnel and learners from a secondary school in

Mpumalanga (Ebersöhn, Bender, & Carvalho-Malekane, 2010). This partnership guarantees the delivery of relevant psychological services based on a growing understanding of the unique needs of rural communities. Apart from the research aspect, the FLY project also includes an academic service learning module for Master Educational Psychology students (Peterson, Dunbar-Krige, & Fritz, 2008). In 2013, I was part of such a group which consisted of 12 students that provided subject-choice and career guidance services to the Grade 9 learners of which I was responsible for six (Ebersöhn et al., 2010). This rural school practicum involved a two-day psychological assessment visit at the beginning of the school-year. This was later followed-up with a two-day intervention (therapy) visit that addressed group and individual needs through workshops and by giving individual feedback to learners about applicable subject choice and career options. Through this interaction with my clients and the interpretation of their assessment material, I learned of their trauma histories and some of the daily hardships they endured. One of the assessment activities involved non-directive Sandplay work where learners were invited to interact with the provided sand and figurines in whichever way they wanted. Upon closer examination, I realised that many of my clients had constructed sand scenes that embodied the trauma and adversity they had shared with me through the assessment activities. It was as if their most pressing problems and emotional issues had manifested in the sand, without them being aware of it. This marked the first occasion where I considered how my rural clients had communicated their traumatisation through the manipulation of the sand and figurines and how prevalent trauma and adversity were in their lives.

1.2 RATIONALE FOR THE STUDY

In my initial literature review, I learned that trauma is deeply rooted in South African society - which is characterised by some of the highest injury and death rates credited to violence in the world (Van Niekerk, Seedat, Ratele, & Suffla, 2014). Nationally, it is projected that nearly three in four South Africans will likely experience at least one significant trauma during their lives with more than half experiencing multiple (Atwoli et al., 2013; Fourie, 2014). In the case of young people, it is approximated that one in five will have experienced some form of violence or crime by the time they were between 15 and 17 years old (Burton, Ward, Artz, & Leoschut, 2015). Research (Kaminer, Du Plessis, Hardy, & Benjamin, 2013; Penning & Collings, 2014) further indicates that for many South African youths experiencing multiple traumas in various areas of their daily lives are the norm as one study discovered that as many as 75%

of the more than 600 adolescents surveyed reported being traumatised by more than three types of violence (Du Plessis, 2013). Of the more than 4 000 high school learners surveyed as part of the Optimus Study on Child Abuse, Violence and Neglect (Burton et al., 2015), 42.2% had been maltreated whether sexually, physically, emotionally or through neglect and 82% had experienced some form of victimisation involving either criminal victimisation or exposure to family or community violence. Globally, young people (aged 12 to 22) are generally victimised at twice the adult rate (Pelser, 2008). However, according to Fourie (2014), to be female or a male aged 15 to 17 years and/or to live in a low-resourced (rural) community in South Africa imply that a person fits the socio-demographic risk profile for exposure to trauma and violence. For teenage girls, this mean bearing the brunt of abuse, neglect and bullying (Burton et al., 2015; Mahlangu, Gevers, & De Lannoy, 2014; Mathews, Abrahams, Jewkes, Martin, & Lombard, 2013) while boys are more likely to experience other forms of violence such as to be assaulted or murdered (Lazarus et al., 2012; Mathews et al., 2013). Kaminer and Eagle (2012, p. 229) explain that for teens that live in low-resourced communities "multiple traumatisation occurs within a broader resource context of poverty, with its attendant burden on family structures and parental coping capacities, an inadequate educational system and limited mental health services for children". Despite increased awareness and knowledge of trauma, experts (Edwards & Blokland, 2011; Herbert, 2012; Lewis, 2009) concur that the assessment, diagnoses and treatment of trauma-related problems remain a challenge for health care professionals due to its intricate nature that causes many sufferers to go unnoticed, be misdiagnosed or left untreated. Evidently, the interplay between trauma and the rural context with its unique challenges creates a harmful dynamism. Finding appropriate ways to screen for trauma in these vulnerable populations are a matter of urgency.

Psychological assessment remains a sensitive, controversial topic in South Africa due to its discriminatory history. Experts (Byrd, Arentoft, Scheiner, Westerveld, & Baron, 2008; Byrne et al., 2009; Dana, 2007; Mushquash & Bova, 2007; Stead & Watson, 2006; Zeman, Klimes-Dougan, Cassano, & Adrian, 2007) agree that there is a dire need to develop new or adapt existing assessment measures to be sensitive to cultural variations and biases pertaining to language, personality, affect and cognition. Ben-Amitay, Lahav and Toren (2009, p. 38) prescribe that appropriate assessment measures and practices relating to young people must be "flexible and tactfully tailored" to each person's "developmental and linguistic level, the emotional difficulty of the problem being evaluated and the degree of report that exists". In the case of

rural youths, they may be reluctant or unable to relay their trauma stories and emotional suffering due to language constraints, the complicated nature of their problems and/or the severity of their psychological distress and traumatisation (Ben-Amitay et al., 2009; Desmond, Kindsvatter, Stahl, & Smith, 2015; Spooner & Lyddon, 2007; Webber & Mascari, 2008). Trauma research (Ben-Amitay et al., 2009; Norton, Ferriegel, & Norton, 2011; Steele as cited in Lacroix et al., 2007) has established that memories of trauma and adversity are primarily stored in the right-side (subconscious) of the brain and that trauma affects verbal proficiency situated in the left-side of the brain so that traumatised individuals struggle to talk about traumatic experiences and the accompanying painful emotions This infers that traumatised clients require a tactile-sensory experience to be able to access, release and express their trauma effectively (Desmond et al., 2015; Garrett, 2014). Through the universal language of play, and by employing culturally appropriate miniature symbols and the natural elements of sand and water, Sandplay can offer rural youths a non-threatening, non-invasive medium to communicate their trauma and psychological pain non-verbally without language constraints and with minimal interference from an assessor. Clearly, these unique features make Sandplay a viable screening method for trauma within the South African rural context with its inimitable challenges.

By going over the existing literature on Sandplay (Dale & Lyddon, 2000; Desmond et al., 2015; Jang & Kim, 2012; Kosanke, 2013; Richards, Pillay, & Fritz, 2012; Webber & Mascari, 2008; Zhou, 2009), I realised that studies have mainly focussed on its therapeutic application with trauma, following an intuitive, subjective approach to understanding sand tray scenes. This meant that paucity in research addressing my specific interest in the area of assessment within the Sandplay field existed. A few international studies have investigated the assessment and diagnostic possibilities of Sandplay and applied a more controlled understanding of sand scenes. By exploring the differences in the patterns of construing between clinical and non-clinical populations, indications of emotional problems (Bühler as cited in Mitchell & Friedman, 1994; Grubbs, 2005), different forms of abuse (Falck, 2005; Grubbs, 1995; Harper, 1991), trauma (Zinni, 1997), serious illness (Cunningham, Fill & Al-Jamie, 2000), coping problems (Cockle, 1993), and the need for therapeutic intervention (Bowyer as cited in Mitchell & Friedman, 1994) were established for sand tray scenes. Mathis (2001) also studied a single case of a sexually abused child's Sandplay process and identified common patterns of meaning associated with specific symbols and sand configurations.

On local ground, Rottier (2009) used the Sandplay therapy process to learn more about the life-worlds of adolescents in foster care to facilitate treatment planning, and Nel (2014) explored the protective and risk factors of rural school youths as indicated in their first sand trays. Evidently, the literature is limited as most of the research findings are based on international, Westernised studies that involved younger children and a series of sand tray scenes.

My study will provide a detailed description in the form of a case study of an adolescent living in a low-resourced community in South Africa with a focus on how trauma is indicated in a single sand tray scene to promote cross cultural assessment research and practice.

1.2.1 PERSONAL MOTIVATION FOR THE STUDY

Apart from the discovered need for empirical research related to my topic, I personally became interested in the potential value of a single sand scene as expressive-projective medium during a one-day Sandplay workshop I attended during my Educational Psychology Honours year in 2011. The practicum required me to build my world in a single tray. In pairs, we then had to reflect on the meaning of our trays. I can still remember how I had projected my inner issues, feelings and past trauma onto a women figure sitting alone on a park bench, watching passively as her life played out in front of her eyes. During my initial reflection, I realised how my studies had isolated me from my family, friends and life in general. Further contemplation made me appreciate how the sand had gently brought the deep-seated issue of mistrust, originating from painful experiences in my childhood leading to disconnection from people and passivity in my life to my attention. At that time, the Sandplay experience resonated with the therapist in me, as I thought about the value of a medium that would allow me and my clients to quickly and unobtrusively get to the heart of the problems to be addressed afterwards in therapy. It was only later that, by participating in the academic service learning part of the FLY-project, my inquisitive nature as a researcher was triggered by my clients' spontaneous engagement with and uncensored use of the sand tray to communicate what each of them needed to address in order to heal.

1.3 PURPOSE OF THE RESEARCH STUDY

Based on the above line of argumentation, the purpose of this study is: *to explore the ways in which a rural school youth indicates trauma in a single sand tray scene*. In order to attain this purpose, the case record of a Grade 9 learner who attended a secondary school in a low-resourced community in Mpumalanga will be analysed in-depth.

1.4 RESEARCH QUESTIONS

1.4.1 PRIMARY RESEARCH QUESTION

This study is guided by the following primary research question:

How does a rural school youth indicate trauma in a single sand tray scene?

In order to address the primary research question, I will attend to the following sub-questions:

1.4.2 SECONDARY RESEARCH QUESTIONS

- What indications of trauma are revealed in literature on Sandplay?
- What is the utility of a single sand tray scene as a screening tool for trauma in a rural school youth?

1.5 ASSUMPTIONS OF THE STUDY

I approached the study with the following assumptions:

- Sandplay is an appropriate medium for the projection and expression of trauma.
- Playing with sand provides a tactile sensory-motor body experience that helps to access, release and express trauma.
- Figurines provide a symbolic vocabulary for the expression of trauma.
- A single sand tray scene provides indications of the presented problems, internal resources and treatment options.
- A case study is the most appropriate method to generate elaborate data in order to answer the primary research question.

1.6 CONCEPT CLARIFICATION

In order to provide a clear understanding of the relevant concepts, I now define and describe the key concepts of my study.

1.6.1 PROJECTIVE TECHNIQUES

Projective techniques are unstructured tests, often used for personality assessment, that rely on individuals' interpretation of ambiguous stimuli (Foxcroft & Roodt, 2009, Wagner, 1999). The rational that underlies projective tests is known as the projective hypothesis (Kaplan & Saccuzzo, 2009). This proposes that "when people attempt to understand an ambiguous or vague stimulus, their interpretation of that stimulus reflects their needs, feelings, experiences, prior conditioning and thought processes" (Kaplan & Saccuzzo, 2009, p. 375). Merrel (2010) explains that individuals "project" their unconscious (hidden) motives, personal conflicts, motivations, coping styles and needs either verbally, by interpreting visual stimuli, by completing sentences, or in drawings when presented with ambiguous stimuli. Projective assessment techniques are usually scored and interpreted in a more intuitive manner (Kaplan & Saccuzzo, 2009; Merrel, 2010).

1.6.2 SANDPLAY

Sandplay is as a distinct type of psychotherapy that originated from the ideas of Margaret Lowenfeld but is theoretically based on the psychology of C.G. Jung and was developed by the Swiss psychotherapist, Dora Kalff, in the 1950s (Kalff, 1991; Turner, 2005). In this psychotherapeutic modality, clients create "three-dimensional scenes, pictures or abstract designs in a tray of a specific size, using sand, water and a large number of realistic figures" (Weinrib, 1983, p. 1). Through a succession of these trays of which interpretation is delayed, the complexities of clients' inner worlds are explored and integrated into their psyches to promote emotional healing, wholeness and individuation (Bradway & McCoard, 1997; McNally, 2001, Snyder, 1997). Sandplay theory (Dale & Lyddon, 2000; Turner, 2005) proposes that the process and products of clients' playful creations are spontaneous and dynamic expressions of their social reality as well as their inner traumas, conflicts, fears, wishes and fantasies. According to Snyder (1997), 'sandtray' is deemed the vehicle or medium of expression; 'sandplay' the process or activity of expression; the 'figurines', the vocabulary for expression; and the 'sandworld', the end product of expression. For this study, Sandplay refers to: *A*

non-verbal method that involves creating a scene by arranging figurines in a sand tray that reflects individuals' internal and experiential realities.

1.6.3 TRAUMA

The term 'trauma' is derived from the 17th Century Greek word *trô'ma*, meaning wound or damage that occurs on a psychological level (Reuther, 2012b). Trauma is subjective and develops from exposure to an incident or enduring conditions in which there is a threat to survival and adaptation which usually leads to long-term psychological and physiological difficulties and changes (Figley, 2012; Lewis, 2009; Valent, 2012; Yoder, 2005). For the purpose of this study, trauma is: *The uniquely personal experience of an event or circumstance that may occur once or repeatedly that places excessive demands on a person's existing coping abilities and significantly disrupts many aspects of psychological and physiological functioning.*

1.6.4 ADOLESCENCE

Adolescence is the period in human development that occurs after childhood and before adulthood, from ages as early as ten to as late as 21 (Louw & Louw, 2007). It represents one of the critical transitions in the life course and is characterised by a tremendous rate of growth and change driven by biological processes (Ang, 2015). This stage is recognised as a preparation period for adulthood during which time several important developmental experiences occur (Panday, Ranchod, Ngcaweni, & Seedat, 2012). Besides sexual and physical maturation, these experiences involve movement towards emotional, social and economic independence from parents, development of an identity; the acquirement of skills needed to carry out adult roles and relationships; and the ability for abstract reasoning and self-control (Ang, 2015; Panday et al., 2012). While adolescence is a time of incredible growth and potential, it is also a time marked by considerable risk during which social contexts exert powerful influences over teenagers (Johnson, Diariotis, & Wang, 2012; Louw & Louw, 2007).

1.6.5 RURAL YOUTH

The National Youth Policy 2009-2014, created by the National Youth Development Agency (Republic of South Africa, 2009, p. 17), categorises rural youths as young people that live in low-resourced areas whereby they face particular constraints with regard to both "accessibility and availability of services and facilities resulting in fewer opportunities and less availability of information than in urban areas".

1.7 RESEARCH DESIGN AND METHODOLOGY

This study is conducted within the qualitative interpretivistic epistemology, using a clinical case study design. The research design and methodology as well as the data collection and data analysis strategies are discussed in Chapter 4 in detail.

1.8 LAYOUT OF THE STUDY

The chapters are structured as follows:

Chapter 1 serves as an introductory chapter to the dissertation and creates a framework for what is to be presented in Chapters 2 to 6. The chapter provides a general orientation, states the research questions, defines the key concepts, and describes the purpose of the study.

Chapter 2 focuses on the first part of the literature review which pertains to trauma. It considers how trauma is conceptualised, its prevalence amongst South African youths, and the impact it exerts during the adolescent phase of development.

Chapter 3 serves as the second part of the literature review by discussing Sandplay. It provides an overview of the Sandplay experience, stresses the importance of the first tray in Sandplay therapy, argues its practical applicability with traumatised rural youths, and identifies indications of trauma in Sandplay literature. Both reviews act as the theoretical framework within which the enquiry is undertaken.

Chapter 4 focuses on the empirical aspects of the research by explaining the manner in which the study was planned and conducted in detail. These aspects involve the research paradigm and research design; the selection of the research context and participant; as well as the collection, analysis and interpretation of the data. The manner in which the trustworthiness of the study and its ethical issues were addressed is also clarified in this chapter.

Chapter 5 serves as an analysis and interpretation of the obtained case results. All findings are discussed in light of relevant literature.

Chapter 6 summarises the findings of the study by addressing the primary and secondary research questions. The potential contributions and limitations of the study as well as some recommendations for future research, training and practice are also presented here.

1.9 CONCLUSION

In this chapter, I have presented an overview of the research problem and my rationale for undertaking this study. The purpose, research questions and paradigmatic perspective of the study were also stated. Furthermore, I defined the key concepts underlying my study and provided a layout of the chapters to follow.

Chapter 2 takes the form of a literature review whereby trauma is explored in relation to the views and findings of contemporary and relevant literature.

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CHAPTER 2
LITERATURE REVIEW: YOUTH TRAUMATISATION

2.1 INTRODUCTION

Chapter 1 provided an overview of the study. Apart from explaining the rationale for undertaking the study, I also formulated the purpose and research questions and defined the key concepts of my study.

As my study is informed by literature, Chapter 2 discusses trauma in terms of its history, definition and character. The prevalence of trauma amongst South African school youths and its impact during adolescence are also considered.

2.2 CONCEPTUALISATION OF TRAUMA

2.2.1 HISTORY OF TRAUMA

The views and conceptions of trauma and its aftermath have changed dramatically over the course of history (Kirmayer, Lemelson, & Barad, 2007). Derived from the Greek word trô'ma, denoting a serious physical wound caused by an extrinsic agent in medical terms, traumatic accounts date back to writings in antiquity (Dulmus & Hilarski, 2003). Yet, according to Hyatt-Burkhart and Levers (2012, p. 39) a genuine interest in the significant impact of trauma on the individual human condition developed slowly and only within recent history. It was in the late 1800s that the neurologist, Jean-Martin Charcot, first studied and recorded the neurobiological symptoms of 'Traumatic Hysteria' and connected them to childhood experiences of violence and sexual abuse (Gordon & Alpert, 2012; Reuther, 2012b). His studies of young women who were beggars, prostitutes or 'insane' revealed that hysteria was not a physiological disease that was thought to originate in a woman's uterus but a psychological state, as its symptomatology lessened when treated with hypnosis (Hyatt-Burkhart & Levers, 2012). Likewise, Pierre Janet and Sigmund Freud developed similar theories about trauma – linking the aetiology of hysteria to early sexual trauma – that were met with contention by their academic peers (Eagle & Kaminer, 2015; Kirmayer et al., 2007; Reuther, 2012a). Both Pierre Janet and Sigmund Freud noted that trauma was associated with a process that altered consciousness which Janet called 'dissociation' and Freud the 'splitting of consciousness' (Valent, 2012).

The second wave of trauma investigations examined the traumatic effects of combat on the mental state of soldiers suffering from the psychologised idea of 'shell shock', later called 'traumatic neurosis', which started in England after World War I, continued during World War II and reached a high point in America in the aftermath of the Vietnam War (Eagle & Kaminer, 2015; Gordon & Alpert, 2012; Hyatt-Burkhart & Levers, 2012; Reuther, 2012a, 2012b). The Women's Movements of the 1960s and 1970s again broadened the definition of 'trauma' to include the interpersonal violence against women, adolescents and children, and the psychological conditions that Burgess and Holmstrom (as cited in Hyatt-Burkhart & Levers, 2012) labelled 'Rape Trauma Syndrome' or 'Battered Women Syndrome'.

Finally, in 1980, Post-Traumatic Stress Disorder (PTSD) was recognised as a valid stress disorder diagnosis by the psychological and psychiatric communities that included it in the third edition of the Diagnostic and Statistical Manual (DSM) of Mental Disorders (Amaudova, Aleksandrov, Stoyanov, Ivanova, & Petrov, 2015; Figley, 2012; Reuther, 2012b). PTSD was categorised as an anxiety disorder because of the persistent anxiety, intrusive recollections, avoidance symptoms, and hyperarousal symptoms presented by trauma survivors of abnormal situations like military combat, rape, physical assault, and serious automobile accidents (American Psychiatric Association (APA), 1980). The refined diagnostic criteria of the DSM IV, released in 1994, were based on the findings of numerous empirical studies and field trials which became widely acknowledged and applied in practice (Eagle & Kaminer, 2015; Hyatt-Burkhart & Levers, 2012).

Contemporary trauma experts (Drozdek, 2012; Gordon & Alpert, 2012; Kirmayer et al., 2007; Massicotte, 2012) concur that trauma is a multifaceted experience in that its extent is defined by complex interactions between different aspects of the victim, stressor, and cultural response rather than by a diagnostic classification that only lists symptoms. Developments in the field of trauma studies have extended the trauma metaphor far beyond psychology to include disciplines like neuroscience (Bremmer, 2011, 2012) and child psychiatry (Perry & Pollard, 1998; Perry, 2009; Van der Kolk, 2003) linking trauma to changes in neurodevelopment and anthropology that looks at trauma more collectively (Edwards & Blokland, 2011; Suri, 2012). Gordon and Alpert (2012) concede that the convergence of these different perspectives contributes to a better understanding of the intricate ways in which traumatic exposure affects victims and possible effective approaches to healing.

2.2.2 DEFINITION OF TRAUMA

During the adolescent years, as is the case in any developmental stage, young people are confronted with various problems, stressful circumstances, and even different crises. The question arises as to what makes an experience traumatic for individuals.

Reuther (2012b, p. 437) explains that trauma is not a natural occurrence, but rather a socio-cultural construction used to label and describe a certain type of experience or circumstance. A traumatic experience differs from ordinary stress or even a crisis in intensity and/or duration as a traumatic experience induces an abnormally intense and/or prolonged stress response (Child Welfare Information Gateway, 2015; Gerrity & Folcarelli, 2008). Nicholson (2010, p. 30) explains that trauma "breaks into and breaks down individuals' physical and psychological capacity to cope with the surrounding world. The usual mechanisms that we have to manage ordinary stress, pain, or discomfort do not work once the experience goes beyond a certain critical depth". According to Perry and Pollard (1998), this means that, when traumatised, the person is unable to calm down and return to a normal state within a reasonable amount of time, as is the case with normal stress.

Figley (2012), Valent (2012) and Yoder (2005) agree and characterise trauma as an experience or circumstance that:

- is unexpected or out of the ordinary,
- involves actual or potential threat to the lives and bodies of individuals or their loved ones,
- challenges psychological integrity,
- produces feelings of intense fear, hopelessness or powerlessness,
- overwhelms individuals' ability to cope with or respond to the threat,
- leads to a sense of loss of control, and
- has a residual effect on individuals' cognitive, physical, emotional, behavioural and relational functioning.

Trauma experts (Briere & Scott, 2013; Van Wijk, 2013; Wiese, 2013) understand that trauma is intensely personal as it not so much the situation that determines whether it is traumatic or not, but individuals' subjective interpretation of and response to the situation. According to Dulmus and Hilarski (2003, p. 27), it is imperative that researchers and professionals in the trauma field recognise that the perceived trauma

does not begin with the life event, "but with the psychic structure that attaches specific attributions to the event (perceived distress)" that is influenced by the individual's background, developmental stage and cultural beliefs.

At its core, trauma destroys people's existing worldviews and assumptions and puts in place new ones that there is no meaning, control, connection, and there are no safe places, or dependable individuals (Goelitz & Stewart-Kahn, 2013; Vaccaro & Lavick, 2008; Van der Merwe, 2009). This new belief system is in direct violation of people's fundamental need to feel safe and secure in their environments, and impedes human development and functioning (Goelitz & Stewart-Kahn, 2013).

For this researcher, trauma is *the uniquely personal experience of an event or circumstance that may occur once or repeatedly that places excessive demands on youths' existing coping strategies and significantly disrupts many aspects of psychological and physiological functioning*.

2.2.3 NATURE OF TRAUMA

Trauma can be experienced individually or collectively and is categorised accordingly.

2.2.3.1 Individual trauma

In a discussion of trauma related to individual experiences, Traumatology (Gerrity & Folcarelli, 2008; Holliday et al., 2014; Lewis, 1999; Terr, 1991; Wiese, 2013) generally distinguishes between Type I and Type II trauma based on the duration of traumatic exposure and its psychological aftermath.

Type I, also referred to as acute trauma, involves a single, isolated incident where traumatic exposure is brief in duration (Gerrity & Folcarelli, 2008; Lewis, 1999; Terr, 1991; Van Wijk, 2013; Wiese, 2013). Sexual and physical assault, getting mugged or robbed, a motor vehicle accident, interpersonal violence between classmates, date rape, school shootings and the sudden death of a close friend/relative are all examples of short-lived traumas that rural school youths can experience directly or indirectly - as a witness or by learning of the traumatisation of a loved one (Briere & Scott, 2013; Goelitz & Stewart-Kahn, 2013; Wade, Shea, Rubin, & Wood, 2014).

Although acute trauma can be unsettling in individuals' lives, children and adolescents tend to outgrow their reactions to a single-occurrence stressor in most instances

(Finkelhor, Ormrod, & Turner, 2007; Finkelhor, Turner, Hamby, & Ormrod, 2011; Green et al., 2000; Lam, Lyons, Griffin, & Kisiel, 2015; Park et al., 2014). However, traumatic events that are perceived as deliberate and that are of a highly intrusive nature such as sexual violence are associated with markedly worse mental health outcomes (Ballard et al., 2015; Calitz, De Jongh, Horn, Nel, & Joubert, 2014; Elklit, Hyland, & Shevlin, 2014; Kaminer, Hardy, Heath, Mosdell, & Bawa, 2013; Price, Higa-McMillan, Kim, & Frueh, 2013). As such, rape has been found to have the highest association with developing life-time PTSD (Breslau et al., 1998). Krupnick et al. (2004, p. 274) add that, when the attacker is also a relative or known individual, the traumatic event is "experienced as a serious violation of the relationship" which makes it even harder to deal with emotionally.

Type II, also known as chronic trauma, involves multiple traumatic exposures and/or prolonged exposure (Gerrity & Folcarelli, 2008). It can entail "multiple victimisations of different kinds" such as getting mugged, being abused and witnessing community violence which, cumulatively, is called *polytrauma* (Finkelhor et al., 2011, p. 4). Traumatic exposure frequently starts in early childhood and, when it also brings about chronic violation of close personal relationships where there is an expectation of trust and safety, it is popularly labelled *complex trauma* (Blaustein & Kinniburgh, 2015, p. 17). Abandonment, dysfunctional or unreliable parenting, growing up in a single-parent home, maltreatment involving all types of abuse (neglect, physical, emotional, sexual), domestic violence, chronic illness, witnessing the suffering of a dying loved one, intimate partner violence in romantic relationships, severe bullying and harassment, political violence, discrimination, living in a crime-ridden area, and extreme economic hardship are all examples of prolonged stressors rural school youths can endure (Briere & Scott, 2013; Goelitz & Stewart-Kahn, 2013; Holliday et al., 2014; Wade et al., 2014).

Chronic trauma is frequently associated with psychological distress, aggression, interpersonal problems, academic failure, conduct problems, delinquency, substance abuse and more psychiatric diagnoses in accordance with the extensively researched dose-response relationship (Felitti et al., 1998; Ford, Elhai, Connor, & Frueh, 2010; Grasso, Dierkhising, Branson, Ford, & Lee, 2016; Kilpatrick et al., 2013; Maas, Herrenkohl, & Sousa, 2008; Murray, Nguyen, & Cohen, 2014; Price et al., 2013; Santiago et al., 2011). Fiorillo and Follette (2012, p. 186) emphasise that "as the number of traumas accumulates, there is a concomitant increase in trauma-related symptomatology". They explain this snowballing effect in that the result of chronic

trauma tends to be cumulative as each traumatic event acts as a reminder of the previous traumatisation and, consequently, reinforces its negative and disturbing impact on the person's life. According to Krupnick et al. (2004, p. 276), "there is little time to work through and integrate the traumatic event when another is followed by another or when trauma becomes a way of life". Finkelhor et al. (2011) hypothesise that the high level of distress of polyvictims can, in all probability, be ascribed to the fact that these youngsters are victimised in many different areas of their lives, leaving few environments where they truly feel safe.

Complex trauma, with its harmful dynamism, often results in a distinctively complex constellation of symptoms encompassing "relational dysfunction, affect dysregulation, identity disturbance and dysfunctional behaviour" (Briere & Scott, 2015, p. 515). As childhood is characterised by sensitive periods for the forming of the personality and attachment bonds with caregivers which foster the capacity for self-regulation and serve as relational templates throughout life, early traumatisation has more disruptive and long-term effects on development (Cook et al., 2005; Gregorowski & Seedat, 2013; Haliburn, 2013; Kisiel et al., 2014; Van der Kolk, 2005a). The National Scientific Council on the Developing Child (2012, 2014) agrees that childhood trauma can have enduring adverse effects as it disrupts the development of various brain regions that are critical for reasoning, learning, focussing attention, controlling emotions and managing stress. Furthermore, empirical studies (Briere & Scott, 2015; Casey & Nurius, 2005; Collins et al., 2010; Grasso et al., 2016; Maas et al., 2008; Mathews & Benvenuti, 2014; Murray et al., 2014) link childhood victimisation to an increased risk for girls to become victims of sexual assault and imitate partner violence and for boys to engage in violent and delinquent behaviour such as committing rape and intimate partner violence during their adolescent and adult years. Experts (Spooner & Lyddon, 2007; Van der Kolk, 1989) make it clear that the compulsive nature of trauma often involves the need to repeat past trauma patterns through self-destructive, out-of-control behaviours, harming others or re-victimisation. Cumulative epidemiological evidence (Ballard et al., 2015; Divir, Denietolis, & Frazier, 2013; Felitti et al., 1998; Mandelli, Petrelli, & Serretti, 2015; Park et al., 2014; Price et al., 2013; Read, Fosse, Moskowitz, & Perry, 2014; Schilling & Christian, 2014; Van Vugt, Lanctôt, Paquette, Collin-Vézina, & Lemieux, 2014) conjectures that the adverse effects of traumatic stress experienced from infancy through adolescence may extend well into adulthood, increasing the risk for lifelong psychological difficulties (e.g. sexually transmitted diseases, suicidality, alcohol and drug dependency, family problems, depression,

anxiety, PTSD), medical health disorders (e.g. pain, cancer, stroke, obesity, fatigue, heart, lung and liver disease) and early death.

2.2.3.2 Collective trauma

Advancements in the trauma field (Dickson & Wycoff, 2013; Edwards & Blokland, 2011; Goelitz & Stewart-Kahn, 2013; Pieterse, Howitt, & Naidoo, 2011) indicate that societies/institutions can inflict ongoing trauma on entire ethnic groups, specific geographical communities and various families through oppressive social structures of which the psychological repercussions can be transmitted between generations. In addressing the social component of trauma in South Africa, both structurally-induced and intergenerational trauma, which are often inter linked, are presented.

Structurally-induced trauma is caused by continually living under adverse or unsafe conditions that are maintained through extreme social disparities that make it impossible for people to meet their basic needs (Yoder, 2005). Poverty, over-crowded shelters, malnutrition, and a lack of adequate sanitation, running water, electricity, schooling and service delivery all contribute to the enduring deprivation and poverty-related stress that young people living in poorly-resourced communities experience routinely (DSD; DWCP, & UNICEF, 2012; Kiser, 2007; Mathews & Benvenuti, 2014; Santiago et al., 2011; Van der Merwe, Dawes, & Ward, 2012; Wade et al., 2014). The research of Mattes (2011) is of relevance here as he found that, often, young people join gangs, become pregnant and abuse substances as ways of escaping the poverty within their communities. Santiago et al. (2011, p. 220) proclaim that “living with persistent poverty is toxic for one’s psychological heath” based on the finding that poverty-related stress was directly related to higher levels of anxious/depressed symptoms and attention and social problems in youth. Poor living conditions also pose ongoing threat to the well-being of parents and their teenagers (Collins et al., 2010; Kiser & Black, 2005; Pinderhughes, Nix, Foster, & Jones, 2001; Santiago et al., 2011). Parents who are overworked, insecure or fatigued can be ill-tempered and emotionally unavailable to their children and inadvertently transmit the demoralising effects of poverty to the next generation (Collins et al., 2010; Kiser, 2007; Kiser & Black, 2005; Klebanov, Brooks-Gunn, & Duncan, 1994, Pinderhughes et al., 2001; Santiago et al., 2011; Van der Merwe et al., 2012). Results of a survey, conducted by the Centre for Social Science Research (Mattes, 2011), about the prospects for generational change in post-apartheid South Africa are disheartening, as most respondents still believe that

the inequities of the past continue to play out in the economic deprivation of many (mostly black) South Africans.

Growing up in neighbourhoods where high levels of community, gang, and criminal brutality are commonplace have resulted in violence being considered not only a normal part of daily living, but also an acceptable way for young people to deal with their problems or to obtain what they feel they are entitled to (Edwards & Blokland, 2011; Jantjies & Popovac, 2011; Leoschut, 2006; Mathews & Benvenuti, 2014; Van der Merwe et al., 2012). A culture of violence is often perpetuated at home through exposure to domestic violence (DSD et al., 2012; Edwards & Blokland, 2011; Leoschut, 2006; Van der Merwe et al., 2012). The subordinate status of women and girls in society also promotes gender inequality and often rationalises interpersonal violence against woman (Edwards & Blokland, 2011; Gevers, Jama-Shai, & Sikweyiya, 2013; Kehler, 2001; Mahlangu et al., 2014). According to Jantjies and Popovac (2011), patriarchal notions of masculinity requiring males to be tough, aggressive, and successful and to exert control over others further contribute to acts of violence in intimate relationships and society in general. Traumatic stress researchers (Diamond, Lipsitz, & Hoffman, 2013; Eagle & Kaminer, 2015; Kiser, 2007; Stevens et al., 2013, Straker, 2013, p. 215) discovered that individuals living in these types of perilous contexts, where the fight for daily survival is never-ending, experience continuous traumatic stress (CTS). Their findings (Diamond et al., 2013, p. 100) question the relevance and validity of a culturally-bound syndrome, such as PTSD, that is driven by the internal psychological effects of a past trauma and "locates the mechanisms to explain ongoing suffering within the mind of the victim rather than in the stressful context". 'Ongoing traumatic stress response' (OTSR) is suggested, not as a new diagnosis, but as an alternative framework to make sense of the intense psychological suffering and ongoing trauma in situations of continuous traumatic stress (Eagle & Kaminer, 2015; Stevens et al., 2013, Straker, 2013).

Intergenerational or historical trauma is the "cumulative psychological wounding over the lifespan and across generations emanating from massive group trauma" (Yoder, 2005, p. 13). Wiechelt and Gryczynski (2012) explain that, despite the fact that the racism, discrimination and oppression of Apartheid occurred in the past, the effects of the traumatisation and unresolved grief are cumulative, and can be observed in both individual and group attitudes and behaviours in successive generations. Mattes (2011) proposes that the escalation in violence across South African generations, in all probability, attests to the intergenerational accumulation of trauma.

From the above discussion, it is clear that inherited poverty, persistent oppression, and disadvantaged socio-economic status continues to have a destabilising effect on many communities even twenty years into South Africa's democracy.

2.3 PREVALENCE OF TRAUMA AMONGST SOUTH AFRICAN SCHOOL YOUTH

2.3.1 THE SCALE AND NATURE OF YOUTH TRAUMATISATION

The South African Stress and Health Study (Williams et al., 2007), which is considered the most comprehensive psychiatric epidemiological study, looked at life-time prevalence of trauma and multiple victimisations in a nationally representative sample of 4,351 participants between the ages of 15 and 65. The results reveal that nearly three in four (75%) South Africans experience at least one traumatic event during their lives, and over half (55.6%) experience multiple. This finding was then supported by the Violence, Injury and Peace Research Unit of the University of South Africa (Fourie, 2014). The Optimus Study on Child Abuse, Violence and Neglect (Burton et al., 2015) estimates that one in five of the 9,730 nationally representative sample of adolescents will have experienced some form of violence or crime by the time they were between 15 and 17 years old. This corresponds with the findings of the 2008 National Youth Lifestyle Study (Leoschut, 2009) involving 4,391 youths between the ages of 12 and 22. A Cape Town study (Kaminer, Du Plessis, et al., 2013) also confirms the pervasiveness of chronic trauma amongst South African youth, as 93% of the 617 children in their research aged 12 to 15, had experienced more than one type of violence, and over 50% had experienced four or more types. Similar results were found by Du Plessis (2013) in that 93.1% of the 616 adolescents surveyed had been exposed to more than one type of violence and 75% to more than three types of violence. These studies attest to the fact that South African young people are exposed to multiple traumas in multiple settings.

Pelser (2008, p. 2) points out that South African youth (aged 12 to 22) are "generally victimised at twice the adult rate and at rates even higher for violent crimes". This worrisome state of affairs was evident in the comparison of the adult victimisation rates of the 2003 and 2007 National Victims of Crime Surveys with the youth victimisation rates of the 2005 National Youth Victimisation Study and the 2008 National Youth Lifestyle Study (Pelser, 2008). In relation to violent crimes, youth victimisation rates were eight times higher than adults' for assault, five times higher for theft and four

times higher for robbery. However, these trends appear to be similar to international ones (Leoschut & Burton, 2009). Various studies (Burton et al., 2015; Calitz et al., 2014; Kaminer, Du Plessis, et al., 2013; Martin, Revington & Seedat, 2013) have reported that witnessing violence (e.g. community violence, domestic violence, school violence) is the most frequently reported traumatic experience amongst youth and being a victim of domestic violence is the strongest predictor of developing both internalising (e.g. PTSD, depression) and externalising (e.g. aggression, conduct problems) difficulties (Collings, 2011; Du Plessis, 2013; Du Plessis, Kaminer, Hardy, & Benjamin, 2015; Fincham, Altes, Stein, & Seedat, 2009; Martin et al. 2013). Parents, family members, friends, acquaintances, teachers, and boyfriends/girlfriends are frequently the perpetrators of trauma (Lazarus, Khan, & Johnson, 2012).

2.3.1.1 Youth traumatisation in the school, home and community

Young people are often traumatised in multiple life domains involving their schools, homes and communities.

a) ***Youth traumatisation at school***

As young people spend a lot of time at school, it is an important victimisation site where children can be repeatedly traumatised. The Centre for Justice and Crime Prevention's (CJCP) National School Violence Study (Leoschut, 2013) examined the extent of violent experiences amongst 5,939 secondary school learners, and found that one in five learners (22.2%) had experienced some form of school violence within the 2011/2012 school year, translating into more than a million learners being traumatised countrywide. Most commonly threats of violence (12.2%), physical assaults (6.3%) and sexual assaults or rapes (4.5%) were reportedly experienced. These experiences of learners were substantiated by more than four fifths (85%) of principals whom reported incidents of physical violence perpetrated by learners on fellow learners in their schools (Leoschut, 2013). The Medical Research Counsel's (MRC) 2008 National Youth Risk Behaviour Survey (Reddy et al., 2010) found that 27% of the 10,270 high school learners surveyed felt unsafe at school and 9% carried weapons to school. Further corroboratory evidence about safety concerns is provided by school principals surveyed in the Trends in International Mathematics and Science Study (TIMSS) (Reddy et al., 2012), whereby only 4% of secondary schools reportedly experienced 'hardly any' safety problems compared to the alarming 41% that had 'moderate' safety issues - which is twice the international average.

In the Optimus Study (Burton et al., 2015), 19.7% of the adolescent participants experienced persistent bullying at school - which is higher than the 13% reported in the National School Violence Study (Leoschut, 2013). TIMSS (Reddy et al., 2012) revealed that bullying was extensive amongst Grade 9 learners, as 42% of those surveyed reported being bullied on a monthly and 33% on a weekly basis. Ncontsa and Shumba (2013) concur as they found bullying to be the most common form of violence in the four high schools they investigated. As South Africa is the fourth fastest growing mobile network in the world, cyber bullying is also on the increase, and one in five (20.9%) teenagers experienced some form of online violence according to the School Violence Study (Leoschut, 2013). Popovac and Leoschut (2012) report that 37% of young people surveyed in the CJCP study and 36% surveyed in the Nelson Mandela Metropolitan University study, have been cyber bullied.

Teenage boys were more likely to be bullied and physically assaulted, whereas girls reported more incidences of sexual violence (Burton, 2008; Leoschut, 2013). Both the 2005 National Youth Victimisation study (Burton, 2006) and the 2008 National Youth Lifestyle study (Leoschut, 2009) indicated fellow pupils as the main perpetrators of violence nine out of ten times. Gang violence, corporal punishment, psychological abuse and sexual misconduct of educators and principals form part of school life. In one study, 49.8% of learners had been hit, caned or spanked by their educators (Pahad & Graham, 2012). Both principals and learners in the 2012 School Violence study (Leoschut, 2013) indicated that easy access to alcohol, drugs and weapons within their schools was a big contributing factor to incidences of school violence. Pahad and Graham (2012) are of the opinion that schools that are located in low-income and violence-prone areas are particularly vulnerable to rising rates of school violence as these institutions usually lack basic infrastructure, services and adequate numbers of educators. Another study (Ncontsa & Shumba, 2013, p. 12) involving four high schools in an impoverished district in the Eastern Cape found that high levels of crime/violence in the community, indiscipline, intolerance, easy access to school premises, unemployment, poverty, lack of recreational facilities and overcrowded classrooms contributed to incidences of violence at schools.

b) ***Youth traumatisation in the home***

Many South African youths are exposed to interpersonal traumas at the hands of family members in their homes. Knowing the exact number of children who are maltreated by parents or caregivers is difficult, as many incidences of abuse go unreported.

Nonetheless, research (Mathews et al., 2013) indicates that child abuse and neglect preceded nearly half (44.5%) of the 1,018 recorded homicides involving children under the age of 18 in 2009. Similarly, a community-based study in Mpumalanga and the Western Cape revealed that over half of the children interviewed (55%) reported lifelong physical abuse by caregivers, teachers or relatives with no significant difference between boys and girls (Mathews & Benvenuti, 2014). In a study involving 231 school-going children aged 8 to 19, Martin et al. (2013) found that almost 50% of the sample reported seeing adults hit one another at home and almost 60% reported feeling unsafe in their homes. Various epidemiological studies (Burton, 2006; Leoschut, 2009, 2013) confirm that family violence is a reality that one in ten (12%) teenagers face by witnessing violent family assaults that involve punching, hitting, pushing, kicking and the use of weapons in their homes. Corporal punishment is also still widely practised in South Africa as a form of discipline that can become quite violent and result in injuries - 24% of adolescents reported being physically disciplined by their parents (Leoschut, 2009).

Concerning the reported experiences of lifelong maltreatment, neglect and domestic violence, the Optimus Study (Burton et al., 2015) shows that 34.4% of teens interviewed had been hit, beaten or kicked by a caregiver; 27.8% had witnessed family violence; 21.3% had been neglected; 19.8% had been sexually abused; and 16.1% had suffered emotional abuse. Girls reported higher rates of neglect and emotional abuse than boys. The reported sexual abuse rate of 19.8% was considerably higher than the global average of 12.7%, but equivalent to those of other African countries (Burton et al., 2015). This also applied to physical abuse when the South African rate of 34.4% was compared with the global rate of 22.6%. When drawing a comparison between the provinces, Mpumalanga had the highest reported rate of sexual abuse (36.8%) and the second highest rate of neglect (11.1%).

c) ***Youth traumatisation in the community***

According to Statistics South Africa (2014), four in ten households believe that the levels of violent and non-violent crimes had increased in their communities and approximately 63% were convinced that these crimes were committed by people in their neighbourhood. These findings correspond with national figures where 50% of learners reported having witnessed violence in their neighbourhood (Leoschut, 2013). The National Study on Violence against Children (DSD et al., 2012) found that one in every five cases of sexual assault took place in a residential street in suburbs or

townships, and that 24% of all victims were victimised by someone from their own area. The accessibility of alcohol, drugs and firearms have been identified as key factors contributing to unsafe neighbourhoods (DSD et al., 2012; Mathews & Benvenuti, 2014; Van der Merwe et al., 2012).

2.3.2 RISK PROFILE OF YOUTH TRAUMATISATION

The socio-demographic risk profile of trauma and violence in South Africa is "notable for its pronounced gender, age and socio-economic features" (Fourie, 2014, p. 1). The disproportionate exposure of young men to acts of violence and criminality, both as victims and perpetrators, is reflected in male homicide rates' being eight times the global indicator (Mathews et al., 2013). Teenage boys in South Africa are at a five times higher risk to be murdered than the global average (Lazarus et al., 2012), and they are 15 times more likely to be offenders than their female counterparts (Leoschut & Burton, 2009). Conversely, the facts that the intimate female partner homicide rate that is six-times the global rate, the "conservative" approximation of 55,000 rapes of girls/women reported annually (that can be as high as 482,000 should all rapes be reported), and South African girls being three times more likely to be killed by abuse or neglect than boys all attest to the interpersonal nature of violence against women (Gevers et al., 2013; Mahlangu et al., 2014; Mathews et al., 2013; Van Niekerk et al., 2014; Williams et al., 2007). Mathews et al. (2013) deem socio-cultural norms that justify violence against women and girls, and gender inequality as major factors in the risk profile of females. Empirical evidence (Breslau et al., 1998; Calitz et al., 2014; Kilpatrick et al., 2013; Martin et al., 2013; McLaughlin et al., 2013) suggests that girls are more negatively affected by violent trauma than boys as they display significantly higher levels of PTSD symptoms. Price et al. (2013) found higher levels of internalising problems (e.g. depression, PTSD) amongst traumatised girls and externalising problems (e.g. Conduct Disorder, Oppositional Defiance Disorder) amongst traumatised boys and links this to the emotionality of girls.

Age-related vulnerability is reflected in the concentration of violent deaths among young men aged 15 to 29 years (184 per 100 000), particularly boys aged 15 to 17 years, and the high rate of fatal child abuse among children younger than 5 years (Lazarus et al., 2012; Mathews et al., 2013).

Traumatic exposure to violence and crime continue to be concentrated in under-resourced communities. Garrib, Herbst, Hosegood, and Newell (2011) examined the

injury mortality rates and the contributing factors to these figures in a large rural population in KwaZulu-Natal. Mortality due to homicide was nine times higher than the global homicide mortality estimates for 2000, and the cause of 50% of all injury deaths, affecting males the most. The finding that nearly one in ten deaths in KwaZulu-Natal was caused by injury was similar in the predominantly rural Mpumalanga province (Smith, 2010). However, in Mpumalanga, homicide was the second leading cause (22.5%) of injury deaths, after motor vehicle accidents (Smith, 2010). The researchers (Garrib et al., 2011) connected the availability of firearms, alcohol, and drugs; widespread poverty; the common lack of education and, as a result, the high unemployment rates; and interpersonal conflict regarding money, intimacy, and power to the risk of injury mortality.

2.4 IMPACT OF TRAUMA DURING ADOLESCENCE

Adolescence commences with the onset of puberty, which can range from as early as 10 years of age to as late as 21 years (Louw & Louw, 2007). It is vital for young people to become increasingly psychologically autonomous, establish intimate friendships, develop a sense of identity and pursue a vacation in preparation for becoming functional adults (Doyle & Perlman, 2012; Louw & Louw, 2007). According to Jones (2008) and Martin et al. (2013), adolescents are more likely to experience trauma than any other age group, as one study found that, by age 11, only 11% of children had experienced a traumatic event; whereas, by age 18, roughly 43% of young people had experienced trauma. Doyle and Perlman (2012) state that this can be explained by the many complex changes that occur during this developmental stage. Neurobiological changes elicit a heightened state of emotional arousal that can compromise teenagers' ability to make rational decisions, and considering that their self-regulatory system is also still developing, proneness towards engaging in risky behaviour can be expected (Johnson, Blum, & Giedd, 2009; Johnson et al., 2012; Jones, 2008; Marshall, 2016). The findings of Johnson et al. (2012, p. 539) indicate that social stressors such as for example social evaluation by peers and peer pressure which are particularly salient in adolescents, can amplify emotional arousal that has been shown to increase risk taking. Adolescents further have a natural propensity to explore as well as to push and challenge boundaries in the pursuit of establishing their personal identities (Ang, 2015; Campbell, 2007; Eckes & Radunovich, 2012; Louw & Louw, 2007). Traumatic experiences such as bullying, embarrassment at school, gang violence, violence at home due to arguing with parents, teen pregnancies, violence in romantic relationships, and experimentation with drugs/alcohol can characterise puberty

(Campbell, 2007; Doyle & Perlman, 2012; Eckes & Radunovich, 2012; Grasso et al., 2016; Louw & Louw, 2007).

Adolescence is considered a stage of particularly vulnerability to stress exposure, and Nicholson (2010) warns that the teenage years can be complicated even more by the fact that earlier traumas and losses can be triggered and re-experienced, which can increase the likelihood of the development of various psychological disorders that can last into adulthood. Research (Chard, Gilman, Holleb, & Teeters, 2013; Giedd, 2010; Lupien, McEwen, Gunnar, & Heim, 2009; Martin, Viljoen, Kidd, & Seedat, 2014) shows that children with a trauma history are at a higher risk of developing anxiety-related and depressive disorders and engaging in risky behaviour patterns during puberty. Lam et al. (2015, p. 177) found that "traumatic stress symptoms increase in severity from early childhood to older youth be it through prolonged stress or as a function of their cognitive development". Evidently, trauma can radically shape adolescents' perceptions about their world and have lasting effects on their biological, cognitive, social, and emotional growth, and this can ultimately lead to developmental arrest (Campbell, 2007; Eckes & Radunovich, 2012, Lewis, 2009).

2.4.1 TRAUMA STRESS SYMPTOMS

Bloom (2005, p. 66) explains that trauma impacts "the way we think, the way we learn, the way we remember things, the way we feel about ourselves, the way we feel about other people, and the way we make sense of the world". The Substance Abuse and Mental Health Services Administration (SAMHSA) (2014) stresses that it is important to keep in mind that, often, trauma stress symptoms are normal ways of coping with being traumatised, but they can still be distressing to experience. Chard et al. (2013) are in accord that, in most instances, trauma survivors are resilient and, with the necessary social support, they can recover over time and function effectively in the main areas of their lives. Conversely, a relatively small percentage of young people will continue to experience symptoms that, in the long-term, can increase in intensity to such an extent that interfere with daily functioning and eventually warrant a psychological or health-related disorder diagnosis (Kenardy, Le Brocque, March, & De Young, 2010; SAMHSA, 2014). The most common trauma stress symptoms, including both reactions directly following trauma and in the long-term; symptoms associated with singular, multiple, and/or ongoing traumatic exposure(s); and their impact on the emotional, physical, cognitive, behavioural, and social functioning domains are described below.

2.4.1.1 Trauma stress symptoms in the emotional functioning domain

Even though the emotional reactions of adolescents to traumatic experiences can vary greatly, SAMHSA (2014) explains that traumatisation tends to induce two emotional extremes of feeling either too much (overwhelmed) or too little (numb). Beyond the initial emotional reactions during the event, strong emotions that are likely to surface after the traumatic incident include helplessness, fear, anxiety, shock, denial, shame, guilt and sadness (Briere & Lanktree, 2012; Edwards & Blokland, 2011; Goelitz & Stewart-Kahn, 2013; Keyes, 2012; Murray et al., 2014; Vaccaro & Lavick, 2008). Still, some adolescents might deny that they have any feelings connected to their traumatic experiences, and describe what they feel as numbness or being unable to experience any emotions (Greenwald, 2012; Kenardy et al., 2010). Young people are often angry with themselves and blame themselves for not being able to defend themselves or others during a traumatic incident, and resent the fact that it happened to them (SAMHSA, 2014). Irrational fears such as of being separated from their loved ones or that the trauma can occur again can also develop (Goelitz & Stewart-Kahn, 2013). Depression and despair often accompany a common loss of interest in school, friends, hobbies, and life in general after a traumatic experience (Briere & Lanktree, 2012, Chard et al., 2013; Martin et al, 2014; Murray et al., 2014). Feeling irritable, moody and hypersensitive are also common responses (Edwards & Blokland, 2011; SAMHSA, 2014).

Adolescents who have experienced early and intense traumatic events often struggle with affect dysregulation (Briere & Scott, 2015), a symptom of Complex PTSD, that, according to Briere and Lanktree (2012, p. 10), involves a relative “inability to tolerate and regulate painful inner states leading to overwhelming affective experiences”. As such, these adolescents can employ maladaptive coping strategies to relieve stress and regain emotional control (Stolbach et al., 2013; Van der Kolk, 1989; Van der Merwe, 2009).

2.4.1.2 Trauma stress symptoms in the physical functioning domain

Physical symptoms can, in many instances, be the first warning signs that adolescents are in distress following traumatic exposure (SAMHSA, 2014). Insomnia, fatigue, increased blood pressure, a racing heartbeat, muscle tension, chest pains, headaches, nausea, sweating, dizziness, gastrointestinal problems, and impaired immune responses are examples of expected physical reactions following trauma (Cook et al.,

2005; Jones, 2008; Keyes, 2012). Kenardy et al. (2010) emphasise that young people can also experience a decrease in their appetite and libido, and adapt poor nutritional and exercise habits. Hyperarousal, which is the body's way of remaining prepared by being on the constant lookout for danger cues (hypervigilance), is a consequence of the biological changes instigated by trauma, and is one of the primary diagnostic criterion for PTSD (Child Welfare Information Gateway, 2015; Gerson & Rappaport, 2013; Keyes, 2012). Having disrupted sleeping patterns and being easily startled are tell-tale signs that a young person is in a state of hyperarousal (APA, 2013).

According to Briere and Lanktree (2012, p. 10), adolescents who have suffered multiple and/or long-term exposure to trauma can manifest a symptom called, 'somatisation' that involves "excessive preoccupations with bodily dysfunction" and results in ongoing physical complaints that cannot be fully explained by any medical condition. The Adverse Childhood Experiences (ACE) study (Felitti et al., 1998) connects severe childhood trauma including abuse, neglect and family dysfunction to a range of chronic adult health conditions such as heart disease, lung disease, liver disease, skeletal fractures and various forms of cancer. The theory behind the physical manifestation of trauma is that distressing experiences that are too painful to bear psychologically get transferred to the body to cope with through physical symptomology or illness (National Institute for the Clinical Application of Behavioral Medicine, 2014).

2.4.1.3 Traumatic stress and the adolescent brain

a) ***Brain maturation***

The basic architecture of the brain follows a bottom-up, sequential organisation that begins before birth and continues into adulthood (Perry, 2009). During this process, the bottom regions of the brain (i.e. brainstem and midbrain) that control the simplest survival instincts and regulatory functions (such as the stress responses) develop first (Perry, 2009; Perry, Pollard, Blaicley, Baker, & Vigilant, 1995). This is followed, in sequence, by adjacent, but higher, more complex regions (i.e. limbic and cortex) that manage more intricate capabilities such as reasoning and emotional regulation (Perry et al., 1995). Growth phases, which are marked by rapid proliferation of neural connections, are followed by periods in which unused connections are reduced or 'pruned'. De Bellis and Zisk (2014) explain that this allows active brain circuits to

become stronger and more efficient. However, the process of sequential development of the brain and brain function is guided by patterned-repetitive environmental experiences as neurons and neuronal connections adapt and change in an activity-dependent fashion (National Scientific Council on the Developing Child, 2014; Perry, 2009; Perry et al., 1995). Clearly, the aim of these developmental courses is to ensure the brain's optimal efficiency to handle the demands of adult life.

b) *Neurobiological stress response system*

Over the short-term, trauma triggers an intense brain/body "alarm state" that informs the person of an impending threat (Vaccaro & Lavick, 2008). All non-essential body and mind processes shut down. During this state, the sympathetic nervous system triggers a rush of adrenaline, cortisol, and other hormones. It also triggers intense fear which causes the person to either fight, flee, freeze or surrender to the dangerous situation instinctively (Bremmer, 2012; De Bellis & Zisk, 2014; Perry, 2009; Perry et al., 1995). Following short-lived trauma, the parasympathetic nervous system shifts the body back into restorative mode by reducing stress hormones, calming the body down, and reinstating higher order brain functioning (De Bellis & Zisk, 2014).

c) *Adolescent brain development*

By the time adolescence is reached, the brain has typically attained its adult weight of approximately 1.4kg and, yet, it is a very sensitive period for the development of certain areas in the brain (Fuhrmann, Knoll, & Blakemore, 2015; Giedd, 2008; Giedd et al., 1999; Lupien et al., 2009). Just before the onset of puberty, at age 11 for girls and age 12 for boys, the brain experiences a second growth spurt of neuron production and synapse formation in the vital cortex (frontal, parietal, and temporal lobes) area that affects social cognition, reasoning, planning and organisation, working memory, impulse control, and the modulation of mood (Cook et al., 2005; Giedd, 2008; Johnson et al., 2009; Lupien et al., 2009). Then, during adolescence, the brain consolidates learning by pruning the unused synapses (grey matter) and wrapping myelin (white matter) around the ones most used to stabilise and strengthen them to optimise brain efficiency (Fuhrmann et al., 2015; Giedd, 2008; Johnson et al., 2009). As the cortex area matures, teens can experience increased cognitive functioning, involving enhancements in intelligence quotient (IQ), working memory and problem solving, and social cognition whereby perspective and face processing skills also improve significantly (Cook et al., 2005; Fuhrmann et al., 2015; Giedd, 2008; Johnson et al.,

2009). Risk-taking and sensation-seeking behaviours decrease from adolescence to adulthood as impulse control increases. An increase in white matter volume and integrity, and a decrease in grey matter are particularly pronounced in the frontal, parietal, and temporal regions of the brain during the adolescent stage of development (Fuhrmann et al., 2015; Giedd, 2008; Giedd et al., 1999; Johnson et al., 2009). The corpus callosum, which is a fibre system that transmits sensory observations between the right and the left hemispheres of the brain, also grows more rapidly than surrounding areas before and during puberty but stops shortly afterwards (Giedd, 2008). This system affects language learning and associative thinking.

d) ***Neurobiological impact of traumatic stress during adolescence***

Predictably, environmental experiences that are constantly threatening, chaotic, unpredictable, and traumatic can affect and alter the biological mechanisms of the human stress response so that trauma victims, even long after their traumatic experiences, continue to perceive and respond to stress differently to someone who is not suffering the aftermath of trauma. Mounting evidence (Bremmer, 2011; 2012; Campbell, 2007; De Bellis & Zisk, 2014; Eckes & Radunovich, 2012; Ganzel, Kim, Gilmore, Tottenham, & Temple, 2013; Lewis, 2009; Lupien et al., 2009; National Scientific Council on the Developing Child, 2012; Nooner et al., 2013; Perry, 2009) from both animal and human studies indicate the lasting effects of traumatic stress on the brain, with long-term dysregulation of the neurochemical stress system (comprising of cortisol and norepinephrine) and changes in the structure and functioning of brain areas involving the amygdala, the hippocampus, and the prefrontal cortex which are all vital to stress regulation and memory. The resulting effects of this are:

- The connections between structures of the brain are made less efficient. As a consequence of trauma, the corpus callosum that facilitates inter-hemispheric communication and other processes including arousal, emotion and higher cognitive abilities has been found to be smaller and act more slowly (Child Welfare Information Gateway, 2015; De Bellis & Zisk, 2014; Gerson & Rappaport, 2013; McCrory, De Brito, & Viding, 2010; Wilson, Hansen, & Li, 2011).
- Recalibration of the arousal system so that it remains active continually (De Bellis & Zisk, 2014; Ganzel et al., 2013; Nooner et al., 2013). This implies that teenagers require little additional stress in their environment to trigger a full-blown stress response.

- Desensitisation of the threat-detection centre of the brain so that teens remain in a highly alert state and perceive threat even when none actually exists. These adolescents can exhibit aggressive behaviour as they might be overly sensitive to perceived threats such as words or gestures from their peers (Child Welfare Information Gateway, 2015; Ganzel et al., 2013; Nooner et al., 2013).
- Disruption of the brain's ability to consolidate memory which hampers learning (De Bellis & Zisk, 2014; McCrory et al., 2010; Wilson et al., 2011).
- Impairment of the brain's ability to regulate emotions and behaviour and make effective decisions (Child Welfare Information Gateway, 2015; De Bellis & Zisk, 2014; Lupien et al., 2009; McCrory et al., 2010; National Scientific Council on the Developing Child, 2012; Wilson et al., 2011).
- A brain that is attuned to cope and survive in dangerous circumstances at the detrimental expense of core mental, emotional, and social functioning, and normal, healthy development (Perry, 2009).

2.4.1.4 Trauma stress symptoms in the cognitive functioning domain

In effect, trauma challenges and shapes adolescents' fundamental beliefs and expectations about themselves, the people in their lives, and the world in general. SAMHSA (2014) explains that various thought-process changes can occur in response to traumatic and adverse life events. Cognitive distortions connected to the self (Briere & Lanktree, 2012; Vaccaro & Lavick, 2008) can involve extreme powerlessness and vulnerability ('I must be in complete control if I am to be safe'), feeling different since the trauma ('I am damaged'), and struggles with low self-esteem ('I am not worthy of love and protection'). Cognitive distortions pertaining to other people may be based on a deep-seated distrust of people (Doyle & Perlman, 2012; Vaccaro & Lavick, 2008; Van der Merwe, 2009). These distortions can revolve around expectations of maltreatment ('Adults hurt me'), rejection ('Adults do not want me'), or abandonment ('Adults cannot be trusted to take care of me'). Vaccaro and Lavick (2008) caution that cognitive distortions related to the world can revolve around expectations of great threat and cause excessive worry ('The world is a dangerous place. I cannot let my guard down').

Many traumatised young people develop a pessimistic outlook on life and a foreshortened future, expecting not to live into adulthood or live a "normal" life, and theories of omens predicting future trauma can also be present (Doyle & Perlman, 2012; Kenardy et al., 2010; Vaccaro & Lavick, 2008). Experiencing excessive or

inappropriate guilt can be adolescents' way "to make sense cognitively and gain control over a traumatic experience by assuming responsibility or possessing survivor's guilt because others who experienced the same trauma did not survive" (SAMHSA, 2014, p. 63). Teenagers can also make incorrect inferences by misconstruing a present situation as unsafe, as it reminds them of a previous traumatic event (Greenwald, 2012; Keyes, 2012; Stolbach et al., 2013). Young people can repetitively think or have nightmares about the traumatic incident and often talk about it with their peers (Goelitz & Stewart-Kahn, 2013). Trauma can also contribute to poor school performance, as young people experience impaired cognitive abilities affecting decision-making, attention, concentration, memory, and mental clarity (Doyle & Perlman, 2012; Gerrity & Folcarelli, 2008; Kenardy et al., 2010; Kisiel et al., 2014; Santiago et al., 2011; Stolbach et al., 2013).

2.4.1.5 Trauma stress symptoms in the behavioural functioning domain

Trauma experts (Godbout & Briere, 2012; Van der Merwe, 2009; SAMHSA, 2014) view the behaviours that adolescents engage in following trauma as potentially dysfunctional ways of managing the intensity of emotions, distressing aspects, and after-effects of trauma or ways of inducing temporary positive states and to self-sooth. The avoidance and tension reduction activities adolescents engage in are:

- Dissociation including depersonalisation, derealisation (e.g. feelings of unreality), and disengagement (e.g. "spacing out") (Elklit et al., 2014; Gerson & Rappaport, 2013; Gold, 2012; Stolbach et al., 2013);
- Abusing substances like cigarettes, alcohol and drugs to self-medicate and anesthetise (Gerson & Rappaport, 2013; Godbout & Briere, 2012; Martin et al., 2014; Van der Merwe, 2009);
- Unsafe/risky or dysfunctional sexual behaviours including multiple sexual partners, having unprotected sex or using sexual activities like compulsive masturbation to self-sooth (Kenardy et al., 2010; Lam et al., 2015; Murray et al., 2014; Stolbach et al., 2013).
- Risky behaviour by taking part in criminal activities (Santiago et al., 2011; Ford et al., 2010; Gerson & Rappaport, 2013);
- Binging and purging (i.e., overeating, and purging through laxatives or inducing vomiting), and developing eating disorders (Briere & Lanktree, 2012; Godbout & Briere, 2012);

- Self-mutilation pertaining to non-suicidal, intentional self-harming actions (e.g. cutting of arms and legs, burning oneself and body piercing) (Briere & Lanktree, 2012; Godbout & Briere, 2012);
- Suicidality that can involve suicidal ideation and suicide attempts (Briere & Lanktree, 2012; Godbout & Briere, 2012; Holliday et al., 2014). A South African study (Cluver, Orkin, Boyes, & Sherr, 2015, p. 52) involving 3,515 adolescents aged ten to 18 years found that "severe childhood adversities increased mental health disorders, thereby increasing suicide attempts threefold and suicide planning fivefold".
- Aggressive, explosive, oppositional, and disruptive behaviour such as starting fights at school (Briere & Lanktree, 2012; Goelitz & Stewart-Kahn, 2013; Greenwald, 2012; Kenardy et al., 2010; Lam et al., 2015; Price et al., 2013).

Behavioural changes can also be a consequence of the traumatic experience such as developing learned helplessness; or becoming overly controlling and avoiding people, places, or activities that are reminders of the traumatic event (Gerrity & Folcarelli, 2008). Many teenagers revert to child-like behaviours by becoming rebellious or being unable to perform responsibilities that were doable in the past, throwing tantrums, or being reduced to tears easily (Goelitz & Stewart-Kahn, 2013). Teens can also become overly self-reliant and want to spend more time alone. Refusing to go back to school or attend social functions is also not uncommon (Kenardy et al., 2010). Many young people experience declining school performance and can even drop out of school (Campbell, 2007; Eckes & Radunovich, 2012; Gerson & Rappaport, 2013; Greenwald, 2012; Lewis, 2009; Perry, 2009).

2.4.1.6 Trauma stress symptoms in the relational functioning domain

Trauma affects a people's relationships with others and with themselves (Briere & Scott, 2015; Gregorowski & Seedat, 2013; Kisiel et al., 2014; Perkonigg et al., 2016). Trauma characteristically encourages social isolation and withdrawal from friends and family as adolescents often fear that others will not understand what they have gone through or think they are "damaged" and different because of what has happened to them (Goelitz & Stewart-Kahn, 2013; Kenardy et al., 2010). Increased relational conflict with and being unable to relate to peers can cause further alienation (Campbell, 2007; Eckes & Radunovich, 2012, Lewis, 2009; Perry, 2009). On the other hand, young people can become very protective of family and friends because they fear losing them.

Adolescents traumatised as children, whether through severe neglect or abuse, may experience challenges with forming and maintaining stable relationships due to negatively affected neurological areas and disrupted attachment bonds (Godbout & Briere, 2012; Gregorowski & Seedat, 2013; Kisiel et al., 2014). As a result, they may develop inappropriate ways to deal with people that can include having difficulty expressing their emotional needs; remaining distrustful of others; avoiding establishing new friendships; and being overly complacent and too dependent on others to meet their needs (Holliday et al., 2014; Lam et al., 2015). Briere and Lanktree (2012, p. 10) warn that severe interpersonal victimisation during the early developmental years can cause "interpersonal problems ranging from difficulties in forming positive, stable relationships to repetitive involvement in relationships that are psychologically or physically harmful". Teenaged girls and boys with interpersonal trauma histories run the risk of perpetuating these harmful patterns by girls' usually becoming the victims of and boys' becoming the perpetrators of intimate partner violence in romantic relationships (Collins et al., 2010; Grasso et al., 2016; Murray et al., 2014). Severe trauma can also "affect the survivor's sense of self or identity" resulting in impaired self-awareness, problems with setting boundaries, and susceptibility to the influences/opinions of other people (Briere & Lanktree, 2012, p. 10; Briere & Scott, 2015; Godbout & Briere, 2012, p. 486).

2.4.2 PREDICATIVE RISK FACTORS

The growing field of developmental traumatology (Amaudova et al., 2015; Benson-Martin, 2013; Collins et al., 2010; Courtois, Otis, & Charvier, 2013; Eagle & Kaminer, 2015; Feltham & Horton, 2012; Gerson & Rappaprt, 2013; Goelitz & Stewart-Kahn, 2013; Holliday et al., 2014; McLaughlin et al., 2013; Wiese, 2013) identifies certain predicative risk factors concerning young people's personal and sociodemographic characteristics that can affect the way they perceive and respond to trauma which can, ultimately, make them more vulnerable to becoming emotionally distressed and developing long-term mental health problems following traumatic exposure. The predictive risk factors are categorised in Table 2.1 below according to genetic, pre-trauma, event-based, and post-traumatic factors. Benson-Martin (2013, p. 50) points out that "factors operating during the trauma and immediately afterwards have the strongest effect" on the recovery of the individual.

Table 2.1: Predicative risk factors of psychological difficulties following trauma

Genetic risk factors:	Genetic susceptibility
	Female gender
	Parents with PTSD
	A family history of psychological problems and mental illness
	Age, either very young or very old
Pre-trauma risk factors:	Lower socio-economic status
	Lower education level
	Minority status
	Poor attachment bonds with caregivers
	Previous traumatic experiences
	A history of psychological problems
	Severe personality deficits (e.g. borderline or dependent personality disorders)
	Being severely maltreated or neglected as a child
	Growing up in a blaming, shaming or guilt-inducing family environment
Event-based risk factors:	The magnitude or severity of the trauma, particularly involving threat to own or loved ones' lives
	Proximity to the traumatic event
	Duration of the trauma
	Ongoing chronicity of traumatic experiences
	Experiencing powerful emotional responses of fear, helplessness, horror, guilt and shame at the time of the traumatic event
Post-traumatic risk factors:	Experiencing dissociation at the time of the traumatic event
	Perceived amount of positive social support versus the amount of negative, blaming influence
	Lack of early psychological intervention soon after the trauma
	Lack of family or community support soon after the trauma
	Disorganised family environment

Research (Cortina et al., 2016; Eagle & Kaminer, 2015; Holliday et al., 2014; Murray et al., 2014; Panday et al., 2012) shows that youth with a positive self-concept and a more optimistic outlook that perceive their traumatic experience as less damaging and have a sense of control over their lives are more resilient after trauma. Receiving social

support and early intervention and being part of a 'healthy' family have been shown to be protective factors that promote healing after experiencing trauma (Collins et al., 2010; Eagle & Kaminer, 2015; Gerson & Rappaport, 2013; Lam et al., 2015; Murray et al., 2014; Panday et al., 2012).

2.4.3 CLINICAL-LEVEL TRAUMA STRESS SYMPTOMS

2.4.3.1 Post Traumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD)

Within the fields of Psychiatry and Psychology, a diagnostic framework is adopted in instances where traumatised clients present symptomatology that cause significant distress or impairment in important areas of daily functioning to ensure appropriate treatment. When youth have directly experienced, witnessed, or learned about an event involving actual or threatened death, serious physical injury or sexual violence, and continue to display various symptoms of the four symptom clusters (*intrusion; avoidance; negative alterations in mood/cognition; in arousal and reactivity*) one month after the traumatising event, a diagnosis of PTSD is given (APA, 2013; Chard et al, 2013; Jones & Cureton, 2014). Only serious traumatic experiences such as physical assault, abuse and neglect, sexual assault/rape, domestic violence, violent crimes, disasters, and severe motor-vehicle accidents warrant a PTSD diagnosis (Amaudova et al., 2015; Jones & Cureton, 2014). Major depressive and bipolar disorders, life-time anxiety, Attention Deficit Disorder/Hyperactivity and conduct disorders, alcohol or drug dependence, and eating disorders often go along with PTSD in trauma survivors (Calitz et al., 2014; Ford et al., 2010; Gerson & Rappaport, 2013; Holliday et al., 2014; Mandelli et al., 2015).

The fifth edition of the DSM (DSM-5), released in May of 2013, contains substantial revisions of the PTSD diagnosis that, according to Amaudova et al. (2015), were carried out to improve diagnostic accuracy and provide greater clinical utility. One of the changes involves adding a 'Dissociative Subtype' which applies to individuals who meet the full PTSD-criteria, but also exhibit either depersonalisation or derealisation (e.g. alterations in the experience of one's self and the world) related to a history of childhood abuse (Amaudova et al., 2015; APA, 2013; Jones & Cureton, 2014). The added Dissociative Subtype is similar to the newly proposed Complex PTSD diagnosis that will most likely be included in the forthcoming ICD 11 to be released in 2017 which is surrounded by controversy (Amaudova et al., 2015; Jones & Cureton, 2014). Since the time that Judith Herman (1995) introduced Complex PTSD as a syndrome,

clinicians dealing with trauma have been appealing for a new diagnosis with symptom criteria that can match the complex and severe nature of the symptomology frequently seen in clients who have been psychological harmed by prolonged, repeated interpersonal violence better (Cloitre, Garvert, Brewin, Bryant, & Maercker, 2013; Cook, et al., 2005; Elklit et al., 2014; Price et al., 2013; Taycan & Yildirim, 2015). Nevertheless, adequate scientific evidence in support of the distinctiveness and pervasiveness of Complex PTSD to justify a separate formal diagnosis was lacking at the time of the DSM-5 publication (Jones & Cureton, 2014; Resick et al, 2012).

Conversely, the World Health Organisation (WHO), which is currently in the process of revising the International Classification of Diseases for its 11th edition (ICD-11), has put forward a trauma-related diagnosis of CPTSD in addition to and with clear distinction from PTSD (Knefel, Garvert, Cloitre, & Lueger-Schuster, 2015; Maercker & Perkonigg, 2013). This recommendation is based on clinical utility and growing empirical support (Cloitre et al., 2013; Elklit et al., 2014; Knefel et al., 2015; Perkonigg et al., 2016; Price et al., 2013; Taycan & Yildirim, 2015) for a CPTSD-symptom profile that, in addition to typical PTSD symptoms, include disturbances in the psychological domains of affect, self-concept and relational functioning. Figure 2.1 below illustrates the main differences between PTSD and CPTSD. A diagnosis of Developmental Trauma Disorder (DTD), which is similar to Complex PTSD, for children and adolescents who have been exposed to multiple, severe adverse childhood experiences (ACEs) growing up has also been proposed (Ford et al., 2013; Kisiel et al., 2014; Stolbach et al., 2013; Van der Kolk, 2005b). Kisiel et al. (2014, p. 1) studied the patterns of trauma exposure and symptoms of 16,212 children in Welfare and provided evidence that “non-violent, attachment-based traumas (e.g. neglect, emotional abuse) in combination with violent interpersonal traumas (e.g. sexual abuse, physical abuse) have an exponential impact on negative outcomes in comparison to other constellations of trauma and beyond the cumulative effects of trauma alone” which cannot be adequately captured by existing diagnostic formulations and require a developmental trauma framework

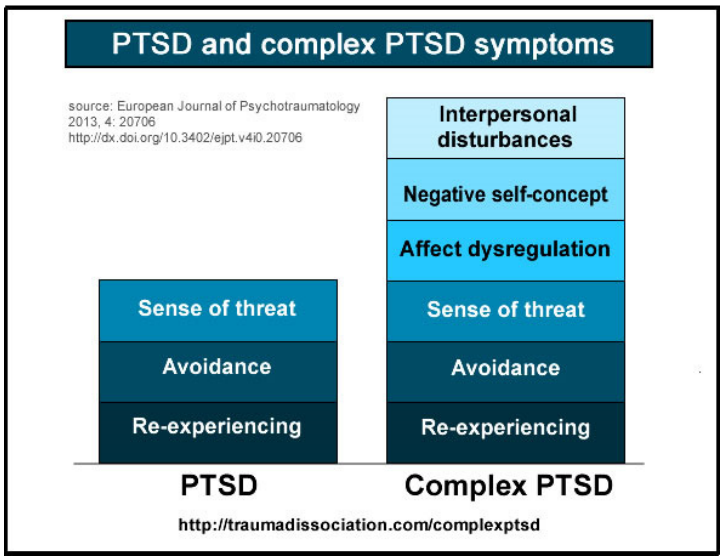

Figure 2.1: PTSD and Complex PTSD symptom configurations, retrieved January 15, 2016, from http://traumadissociation.com/complexptsd

2.5 CONCLUSION

In this chapter, the multifaceted nature of trauma and its pervasive impact on school youth was examined through the literature.

The next chapter reviews the Sandplay literature to provide an overview of the Sandplay method, its application, its process, and the ways in which trauma is indicated through it.

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CHAPTER 3
LITERATURE REVIEW: SANDPLAY AND TRAUMA

3.1 INTRODUCTION

In Chapter 2 I reviewed the literature on how trauma is conceptualised, its prevalence amongst South African youth and how trauma impacts adolescents.

In this chapter, firstly, I explore Sandplay in terms of its history, the way it is put into practice, the stages it involves and the role of the therapist. After that, I discuss the importance of the first sand tray, debate the practical applicability of Sandplay with traumatised rural clients, and identify indications of trauma in the Sandplay literature.

3.2 HISTORY OF SANDPLAY

Sand, water and miniatures as expressive-projective mediums have been extensively used with children and adults for research, assessment and therapeutic purposes (Dale & Lyddon, 2000; Zhou, 2009). Homeyer and Sweeney (as cited in Lyles & Homeyer, 2015, p. 70) describe Sandplay therapy as an "expressive and projective mode of psychotherapy involving the unfolding and processing of intrapersonal and interpersonal issues through the specific use of specific sand tray materials as a nonverbal medium of communication, led by the client and facilitated by a trained therapist". The history of Sandplay is not just fraught with different views on what it should be named, with Bradway's (1979, p. 85) referring to the terms 'sandtray', 'sandtray worlds', 'sandworlds' or 'sandplay', but also with disunion between either adopting a realistic/objective/diagnostic approach or an intuitive/subjective/healing approach when engaging with this powerful modality (Mitchell & Friedman, 1994). Despite these challenges, Sandplay has grown in its popularity, and is used by many mental health practitioners in a wide range of settings (i.e. clinical practice, schools, hospitals, prisons), client configurations (i.e. individuals, couples, families, groups), and psychological issues (i.e. bereavement, social anxiety, trauma) (Ben-Amitay et al., 2009; Campbell, 2004; Green & Connolly, 2009; Jang & Kim, 2012; Lacroix et al., 2007; Zhou, 2009).

Historically, Sandplay as a psychotherapeutic technique originated in 1929 with the work of Margaret Lowenfeld who was a paediatrician (Carey, 1999). The book of H.G. Wells called 'Floor Games' that contained descriptions of how his two sons resolved

their personal issues through playing with miniatures on the floor (Allan & Berry, 1987; Weinrib, 2004) as well as Lowenfeld's own observations of children's spontaneous use of play materials in her London clinic inspired her to develop the 'World Technique' (Thompson, 1981; Weinrib, 1983). By adding the elements of sand, water and miniatures and constricting play to a metal box, she discovered a medium through which children could reveal their inner states and social-cultural worlds and communicate their problems non-verbally through play (Hutton, 2004; Mitchell & Friedman, 1994).

Lowenfeld differed from the Freudian views of the conscious and unconscious in relation to how the minds of children worked as she theorised that "rather than having an unconscious per se, children were indeed aware of their thoughts and feelings but lacked the verbal skills required to fully express themselves" (Hutton, 2004, p. 606). This implied that children processed their thoughts and feelings first of all through a primary system comprising of their senses, bodily actions and play and only later added language skills which made up the secondary system (Carey, 1999, p. 6). For Lowenfeld, Sandplay became a projective tool that provided children with the opportunity to express their inner thoughts and feelings on a symbolic level and "for those thoughts to be developed without the need to use the 'secondary' or rational/conscious (verbal) system" (Hutton, 2004, p. 607). She primarily used Sandplay as a communicative tool that allowed her to get to know and understand her clients better during therapy (Turner, 2005). The 'World Technique' also allowed anxious or resistant clients to use the sand for sensori-motor play by shifting, pouring or feeling the texture of the sand. Hutton (2004, p. 609) explains that Lowenfeld considered these types of actions a part of children's thought process and, as such, of therapeutic value. Lowenfeld's work influenced numerous clinicians and researchers around the world, and her 'World Technique' was adapted and changed according to her students' own theoretical orientations, practices and client needs (Carey, 1999, Mitchell & Friedman, 1994; Thompson, 1981).

Gösta Harding, who studied under Lowenfeld in 1949, developed the Erica Method that became fairly popular in Sweden (Mitchell & Friedman, 1994; Nelson, 2011). Even though this method used procedures and tools similar to that of Lowenfeld's World Technique, it had clearly distinguishable diagnostic and therapeutic applications (Mitchell & Friedman, 1994; Nelson, 2011).

According to Mitchell and Friedman (1994), Charlotte Bühler's unique contribution to Sandplay pertains to applying scientific method to sandwork for the first time by standardising the interpretation of trays and investigating cultural differences in sand portrayals. As a Child Developmental Researcher from the University of Vienna, she recognised the potential of using miniatures in a demarcated space for assessment, diagnostic and research purposes (Allan & Berry, 1987; Carey, 1999). Bühler adapted the 'World Technique' to make her own diagnostic instrument which she called the 'World Test' and later renamed the 'Toy World Test' to differentiate her work from that of Lowenfeld (Mitchell & Friedman, 1994). The 'Toy World Test' used a standardised rating scale to differentiate pathological and non-pathological sand worlds and could only be utilised for assessment and diagnostic purposes (Turner, 2005). Bühler's approach excluded using sand and a diagnosis was made based on the initial one or two sand scenes rather than by looking at a series of trays (Mitchell & Friedman, 1994, p. 37).

In America, Hedda Bolgar and Liselotte Fischer developed a non-verbal, projective diagnostic test called the 'Little World Test' or 'Bolgar-Fischer World Test' (Bolgar & Fischer, 1947; Mitchell & Friedman, 1994). Developing scoring systems that can be used to rate observable behaviour during the construction of sand worlds and normative standards for the interpretation of adult trays discern these two researchers from their peers (Bolgar & Fischer, 1947; Mitchell & Friedman, 1994; Thompson, 1981).

Laura Ruth Bowyer, a Psychology lecturer at the University of Glasgow in Scotland in the 1970s, was another researcher of Lowenfeld's technique and a major contributor to Sandplay research (Mitchell & Friedman, 1994; Thompson, 1981). Using the 'World Technique', Bowyer established scoring categories that significantly improved the analyses of sand trays and developmental norms for children as well as for adults of both clinical and non-clinical populations (Mitchell & Friedman, 1994; Turner, 2005). She investigated how intelligence impacted sand tray creations, the projective value of the 'World Technique' with cognitively-handicapped and deaf populations, and also the importance of using sand for the success of this technique (Dale & Lyddon, 2000; Mitchell & Friedman, 1994).

Notwithstanding Margaret Lowenfeld's respected contribution to the field of Child psychotherapy, it was not until the late 1950s that one of her students, a Swiss Jungian analyst named Dora Kalff, understood the therapeutic potential of the 'World

Technique' with adults (Bradway, 1979; Weinrib, 1983). Turner (2005) points out that Kalff's work is a combination of Lowenfeld's 'World Technique', Carl Jung's theories about the psyche's propensity to heal itself, and the principles of Zen Buddhism. Kalff developed her own kind of Sandtray therapy called 'Sandplay'. Bradway (2006) and Weinrib (2004) discern Sandplay from other Sandtray applications as being a process that involves making a succession of trays, delayed interpretation of the meaning of trays and dual processes occurring simultaneously for, as the analytical interpretation of daily life events and unconscious material promote increased consciousness, so the deliberate regression into the preconscious, preverbal matriarchal level of the psyche promotes healing. For Kalff (1991), the sand tray is a tool through which individuation and healing can be attained within the free and protected space provided by the Sandplay therapist. Sandplay has dominated the Sandtray field over the years and Kalff's followers support an intuitive, subjective approach towards healing and wholeness (Dale & Lyddon, 2000; Mitchell & Friedman, 1994; Zhou, 2009).

According to Bradway and McCoard (1997), the discerning feature between Sandtray and Sandplay lies in the notion of expression versus experience. In Sandtray work, the emphasis is on expression whereby the sand allows clients to communicate painful experiences they were unable to express before due to their emotional load and impact. In contrast, Sandplay work recognises the importance of the "experience that clients actually have when they make a sand scene" and "not what the therapist thinks the client is expressing to the therapist" (Bradway & McCoard, 1997, p. 37).

3.3 PRACTICAL APPLICATION OF SANDPLAY

In Sandplay, the client is invited to create a free scenario in a standardised sand box or tray using an assortment of miniatures and objects (Bradway, 1979; Zhou, 2009). According to Wiese (2013, p. 200), this procedure elicits sensations and emotions in the client which are "impressed in the choice of the miniatures, their disposal in the sand and in the actual scene". Gallerani and Dybicz (2011) agree that each chosen object is symbolic of something in the client's life world. Spooner and Lyddon (2007) explain that a sand tray can be organised in a variety of ways that can represent ideal or troubling circumstances, complex emotional issues and conflicts or solutions to specific problems that can be relevant to both the internal and external reality of a client.

The size of the sand tray is standardised at approximately 57cm×72cm×7cm as this allows the sand scene to be taken in at one glace without unnecessary head movement by both the client and therapist and offers a contained space for play (Kalff, 1991). Usually, two sand trays are provided as the one is half-filled with dry and the other one with wet sand (Steinhardt, 1998). Turner (2005) highlights the advantage of wet sand is that it can be easily used for moulding, building and tunnel-making. The insides of trays are painted blue to simulate water, sea, rivers or sky when the sand is moved to the side (Steinhardt, 1998; Weinrib, 1983). A container with water is placed close-by so that the client can add water if desired.

Garrett (2014) recommends that miniatures and small objects that represent the various aspects of a client's life and fantasy world should be arranged on shelves near the sand tray. Culturally-appropriate objects and a wide variety of building materials out of which clients can make needed items should also be available. The most common miniature categories according to Mitchell and Friedman (1994) include:

- people - domestic, military, fantasy, mythological, from various historical periods, of many nationalities and races and in various functions;
- animals - wild, domestic, fantasy, prehistoric, zoo, farm and marine;
- buildings - religious and nonreligious, schools, castles and houses;
- vegetation - trees, bushes, plants, vegetables and flowers;
- vehicles - land, air, water, space and war machines;
- structures - fences, gates, bridges, doorways and corrals;
- natural objects - rocks, stones, wood, seashells, pinecones, feathers, bones and eggs; and
- symbolic objects - wishing wells, treasure chests, jewellery, stones and glass marbles.

3.4 STAGES OF SANDPLAY

The Sandplay process involves two stages, the first of which entails making a scene or picture in the sand (Bradway & McCoard, 1997). With self-directed sandwork, the therapist will encourage clients to make whatever they wish in the sand without providing any further directives (Turner & Unnsteinsdóttir, 2011; Vinturella & James, 1987). Clients should be reassured that there is no right or wrong way to build a scene (Garrett, 2014) as this affords clients the freedom "to choose the process and outcome" of their Sandplay experiences (Spooner & Lyddon, 2007, p. 55). Sandplay theory

asserts that when clients are permitted to choose freely they will select those objects and miniatures that have personal meaning and relevance to their life situation (Turner, 2005). As clients work in the tray, the therapist records the sand play process as well as what clients say and how clients behave (Turner, 2005; Weinrib, 1983). According to Vinturella and James (1987, p. 233), the first stage affords clients the opportunity to "re-enact experiences and to play out feelings of tension, frustration, insecurity, aggression, fear, bewilderment, and confusion that occur in the real world".

The second stage involves asking clients to give their scene a title, tell the story of or explain the scene, or to make comments about feelings experienced while doing it (Vinturella & James, 1987; Wiese, 2013). Zhou (2009, p. 70) explains that this allows clients to "clarify personal meanings and to integrate new feelings and insights that may have emerged through the creation of the sand picture". Next, the scene is photographed or sketched for future reference. Weinrib (1983, p. 14) warns that a picture should never be dismantled in the client's presence as this would be to "devalue a completed creation, to break the connection between the client and his inner self and the unspoken connection to the therapist". The content of the tray as well as its interpretation is typically not discussed with clients in the same session (Snyder, 1997; Turner & Unnsteinsdóttir, 2011). Allan and Berry (1987) note that interpretation is seldom needed because psychological concerns are understood and resolved on an unconscious, symbolic level.

3.5 ROLE OF THE THERAPIST

The therapist provides a safe and protected space where the therapist does not intrude, direct or interpret clients' symbolic expression (Allan & Berry, 1987; Grubbs, 1994; Kalff, 1991). According to Snyder (1997, p. 79), this "sacred space allows the inner drama of the client and his or her healing potential" to unfold. By the therapist's maintaining an attitude of receptivity and unconditional positive regard, clients can bring unconscious material into consciousness without censorship (Vinturella & James, 1987; Weinrib, 1983). The most important function of the therapist is to act as a witness to the process of play by participating empathetically and observing clients' pain, struggles, growth and healing (Allan & Berry, 1987; Bradway & McCoard, 1997).

3.6 SIGNIFICANCE OF THE FIRST SAND TRAY SCENE

Kalff (1991) considered the first sand tray scene the most important scene in Sandplay therapy as it provided her with insights into her clients' issues that needed to be addressed in the therapy process, their available resources that could be utilised during therapy, as well as the direction for healing and/or transformation. Weinrib (1983, 2004) cautioned that the first sand scene may be a more conscious, realistic scene. Nonetheless, it may provide indications of clients' problems and their possible resolutions. Friedman (as cited in Mitchell and Friedman, 1994) suggested examining a first tray in terms of areas that are particularly energetic or troubled, the types of groupings and problems indicated as well as the available resources or strengths. Harper (1991, p. 94) found that in many instances of sexual abuse "the first world was definitive and the subsequent ones a repetition of this same world". Pickford (as cited in Mitchell & Friedman, 1994), who was a colleague of Lowenfeld, felt strongly that a client's 'special' problem is frequently revealed in the first scene. This means that a single sand tray scene can potentially be used as a screening tool to learn more about clients' inner emotions and strengths as well as their perceptions of their circumstances and personal problems (Ben-Amitay et al., 2009; Bradway, 2006; Turner & Unnsteinsdóttir, 2011). This type of information can further assist clinicians in formulating a diagnosis and choosing suitable intervention strategies.

A single sand tray technique was utilised as part of an initial psychiatric examination to build rapport with children with poor verbal capacities and to evaluate their strengths, attributes and the presenting problems to assist with making a fitting diagnosis and planning therapy (Ben-Amitay et al., 2009). Another study used this technique cross-culturally to identify the possible risk factors that young people who live in low-resourced communities face as well the protective resources they have at their disposal (Nel, 2014). In this study, a single sand tray scene will be utilised as a screening method for the identification of trauma and trauma-related problems experienced by a rural school youth.

3.7 CONTEMPLATING THE PRACTICAL APPLICABILITY OF SANDPLAY WITH TRAUMA

By reflecting on the distinctive character of trauma and its impact on young people as well as the unique features of the Sandplay method, convincing arguments for the

practical applicability of a single sand scene with a traumatised rural youth are presented below.

Carey (1999, p. x) describes the impact of trauma as essentially pre-operational (pre-verbal) and explains that it "impacts people of any age at a very basic and sensory level, and it does not lend itself to sophistication, categorisation or reason". Memories of trauma and adversity, including early preverbal memories, are partially stored as implicit (unconscious) memories in the right hemisphere or non-verbal part of the brain as well as in the limbic system and body (Grille, 2003; Norton et al., 2011; Schadler & Schubach-De Domenico, 2012; Weinrib, 2004). Implicit memory consists of physical sensations, visual images, emotions, and sounds related to a traumatic event (Grille, 2003; Weinrib, 2004). Implicit memory makes use of a process called 'iconic symbolisation', whereby an experience is given a visual form as a picture or symbol which allows it to be retrieved from memory so "it can be encoded, given a language, and then integrated into consciousness" (Steele as cited in Lacroix et al., 2007, p. 101). Parts of trauma memories are also stored as explicit (conscious) memories in the left hemisphere or verbal part of the brain consisting of dates, facts and details related to the traumatic event. Grille (2003) emphasises that explicit memory uses words to describe what a person is thinking and feeling, process information and reason as well as to attach meaning to an experience. However, trauma affects the language area situated in the left hemisphere of the brain and also the corpus collosum that co-ordinates communication between the two hemispheres. This result in traumatised individuals struggling to describe what had happened to them or to talk about past traumas and painful emotions (Norton et al., 2011; Steele as cited in Lacroix et al., 2007). Apart from trauma being encoded in the brain, it is essentially encoded in the body as the largely sensory-based diagnostic criteria for PTSD in the DSM-V demonstrate (Grille, 2003; Norton et al., 2011). Trauma therapy research (Cook et al., 2005; Desmond et al., 2015; Garrett, 2014; Green & Connolly, 2009; Norton et al., 2011; Schadler & Schubach-De Domenico, 2012; Webber & Mascari, 2008) has established that the nonverbal expression of emotions and actions has a more immediate and helpful effect than the using of words, and can be triggered through tactile sensory-type modalities that promote insight and healing of deeply personal issues.

On the one hand, playing with sand, a tactile sensori-motor body experience, can bring up and release strong feelings and body memories of trauma (Desmond et al., 2015; Green & Connolly, 2009; Lagutina, Sperlinger, & Esterhuyzen, 2013; McNally, 2001;

Schadler & Schubach-De Domenico, 2012). On the other hand, playing with miniatures provides a symbolic language through which an implicit (unconscious) experience can be transformed into an explicit (conscious) experience that can more easily be put into words and discussed with a therapist (Garrett, 2014; Lacroix et al., 2007; Lagutina et al., 2013; Richards et al., 2012). As both hands are used, both lobes of the brain are engaged in play to promote integration and expression (Turner & Unnsteinsdóttir, 2011; Vinturella & James, 1987). Weinrib (2004, p. 1) motivates that, as a nonverbal, nonrational form of expression, Sandplay is uniquely able to aid regression by offering "a gentle access route to the right hemisphere of the brain where early and preverbal memories of trauma and adversity" are stored. Clearly, Sandplay offers an effective and natural communication medium for rural youths with poor verbal skills likely due to language barriers, the intricate nature of their issues or the fact that their traumatisation were so severe that they are unable to talk about it (Desmond et al., 2015; Spooner & Lyddon, 2007; Webber & Mascari, 2008). Ben-Amitay et al. (2009) concur that children suffering from PTSD are reluctant to talk about their experiences and would prefer to express themselves through activities or re-enactment. Clients who are in crisis due to severe trauma require a sensory experience to access, release and express trauma (Desmond et al., 2015; Garrett, 2014). Kosanke (2013, p. 53) concludes that by "letting their hands tell the story, using symbols to express their speechless pain, allows clients to be in contact with their experiences and to communicate processes that are non-verbal by nature".

Trauma causes youths to feel constantly overwhelmed by intensely painful emotions, including fear, hopelessness, helplessness, anxiety, anger, shock, guilt and shame that are often linked to a poorly developed ability to tolerate and regulate these painful emotional states that are related to the traumatic experience (Briere & Lanktree, 2012; SAMHSA, 2014). Consequently, young people will try to avoid talking about what has happened or any trauma triggers that can remind them of the traumatic incident (SAMHSA, 2014).

Sandplay decreases the ego controls and defence mechanisms by creating a sense of distance, safety and trust that promotes greater levels of disclosure of traumatic experiences, perceptions, pain and repressed memories (Carey, 1999; Garrett, 2014; Green & Connolly, 2009; Kosanke, 2013; Richards et al., 2012; Webber & Mascari, 2008). To achieve this, Carey (1999) and Kosanke (2013) note that Sandplay employs several properties including: symbolisation (use a miniature to present the abuser), metaphor (use a scene or story to present the traumatic experience), the "as if" quality

(pretend quality to act out events as if they are not real), projection (project intense emotions onto the miniatures that can then safely act out these emotions), and displacement (displace negative emotions onto the miniatures). The free and protected holding space created by the therapeutic relationship (Spooner & Lyddon, 2007), the physical containment of the size and shape of the tray (Vinturella & James, 1987), as well as the predictability of a well-organised therapy space (Bradway & McCoard, 1997) further contribute to an atmosphere of safety to share trauma. Green and Connolly (2009) point out that, as play is the natural way of communication for children and sand and water are well-known play mediums, most youths should feel comfortable using Sandplay. Evidently, Sandplay can be used effectively with clients that are very resistant and fearful (Spooner & Lyddon, 2007).

Trauma overwhelms teenagers' ability to cope with or respond to the dangerous situation which leads to a sense of loss of control and power (Goelitz & Stewart-Kahn, 2013; Vaccaro & Lavick, 2008). In order for people to feel secure and cope with life's demands in general, they hold on to the fundamental belief that they are able to protect and fend for themselves (Van der Merwe, 2009). However, when this deep belief is shattered through trauma, it leads to an overwhelming sense of loss of control and cognitive distortions of being powerless against a world that is filled with danger (Goelitz & Stewart-Kahn, 2013; Vaccaro & Lavick, 2008; Van der Merwe, 2009).

The Sandplay process is led by clients (Carey, 1999; Kosanke, 2013). This gives back the needed control and power, which is often lost during the traumatic experience, over their environment to attend to painful and often graphic memories of abuse, injury or death (Webber & Mascari, 2008).

Through the universal language of play, and by employing culturally appropriate miniature symbols and the natural elements of sand and water, rural school youths can communicate their trauma without language constraints. These unique features make Sandplay a viable screening method for trauma to be applied to a rural youth client.

3.8 INDICATIONS OF TRAUMA IN SANDPLAY LITERATURE

Research on the indications of emotional problems and difficulty coping are also included in this section as they often are trauma-related and act as signs (symptoms) of trauma.

3.8.1 INDICATIONS OF EMOTIONAL PROBLEMS IN SAND TRAYS

Bühler (as cited in Carey, 1999, p. 7–9; Mitchell & Friedman, 1994, p. 34–35) distinguished between clinical and non-clinical sand worlds of children using the 'World Test'. Based on the number of and types of items used or omitted as well as the arrangement of the construction, she identified three types of signs or indicators of emotional problems/disturbances that can be present in sand worlds, namely:

- *A-signs*: Aggressive world signs entail various acts of aggression such as soldiers fighting, animals that bite, wild animals, accidents, people getting hurt or falling and raging storms. Bühler concluded that displays of aggression are normal, but when A-signs are present in the first tray, more intense aggression may be suggested. Instruments of aggression could have a double meaning as they can represent protection and self-defence on the one hand, but also destruction on the other hand. For Bühler, the repeated depictions of accidents provided a strong indication of emotional problems and deep resentment. She also interpreted violence in worlds as possible projections of anger.
- *E-signs*: Empty world signs are when less than 50 objects are used, miniatures from only a limited number of categories are included, and major groups of people are omitted (e.g. no adults, only children, or only soldiers or police). For Bühler, an empty world can indicate inner emptiness, loneliness or a need to be alone. It can also point to resistance, emotional fixation on certain objects, or blocked creativity. The complete omission of people could either show a desire to escape from people or to challenge them.
- *CRD-signs*: Distorted worlds refer to closed, rigid and disorganised worlds. Closed worlds are completely or partly fenced in. Rigid worlds have unrealistic rows of animals, people or objects that are lined up in a fixed, still manner; and, in disorganised worlds, items or groups of objects are arranged in a chaotic and unrelated manner. Bühler stressed that CRD-signs are more significant symptoms of emotional disturbance than the other two types of signs and at least one of the CRD signs is always present. CRD-signs could indicate a desire for protection and security in insecure individuals or a need to resort to self-protective devices to hide emotions. They could further indicate rigidity and confusion. Making use of enclosures may be an attempt to define oneself or to imprison an enemy. Bühler warned that, when fences were built before any other materials were used; it probably indicated an unusual need for protection.

Carey (1999) observed this phenomenon in the initial sessions of highly anxious children. Rigid worlds could also indicate varying degrees of compulsive orderliness, perfectionism and excessive fears; and disorganised worlds could indicate varying degrees of confusion and dissolution of the personality structure.

By incorporating Bowyer's research on developmental norms, Grubbs (2005, p. 17–18) established that the presence of the following features in sand tray scenes after age five are indicative of various emotional problems or disturbances:

- *Very empty, lonely-appearing worlds* could suggest withdrawal, apathy and inaccessibility.
- *Large portions of a sand tray are being ignored*, except in specific situations with a highly symbolic quality. Some sparseness in a tray is acceptable as long as the spatial arrangement appears balanced.
- *Animals devouring other animals or people*, excluding realistic situations such as when animals are hunting other animals as food.
- *Very disorganised worlds* may indicate a regression in age as far back as two to four years of age.
- *Heavily-fenced worlds* with no gates or entryways may imply a fear of own impulses, a need to protect the inner self or obsessional traits.
- An *overemphasis on having things in rows* without an apparent realistic reason.
- *Burying of objects*, pushing figures down into the sand, and pouring sand over people and things can possible show a regression in behaviour and a sadistic attitude towards oneself or other people.
- *No human figures* in a scene (unpeopled world) may reflect a feeling of alienation or fear of threat, unless the scene is on an archetypal level.
- *Continuous sadistic violence* on family members and vulnerable victims could suggest past trauma, abuse in the home and/or self-abusive behaviour.
- An avoidance or continuous *failure to touch the sand* most likely suggests a disconnection from the core part of the self.
- *Depictions of bizarre (satanic) and extremely primitive scenes (i.e. reptilian)* might indicate a tendency towards psychosis.
- *Penning or crowding of figures into a thigh mass might* suggest a sadistic attitude.

Lowenfeld (as cited in Carey, 1999) found that emotional problems were present when large parts of the tray were fenced in; wild animals were positioned so that it appeared as if they did not belong in a particular spot or scene; and objects were out of place. She also noted that the same objects were often used repeatedly.

Webber and Mascari (2008, p. 3) associate the following types of sand worlds with a number of emotional problems, including:

- *Empty worlds* symbolise sadness and depression.
- *Unpeopled worlds* symbolise pain or abuse.
- *Fenced* or *closed worlds* symbolise compartmentalised or protected issues.
- *Rigid, schematic* or *worlds with rows* symbolise control or hiding abuse.
- *Disorganised, incoherent* or *chaotic worlds* symbolise chaos.
- *Aggressive worlds* without human figures except for soldiers symbolise violence and anger.

3.8.2 INDICATIONS OF THE NEED FOR THERAPEUTIC INTERVENTION IN SAND TRAYS

Using the 'World Technique', Bowyer (as cited in Mitchell & Friedman, 1994, p. 66–71) identified three types of sand trays that could suggest the need for therapeutic intervention, namely:

- Sand trays that are *not age-appropriate*.
- Sand trays that deliberately or consciously *communicate problems*.
- Sand trays where the signs identified by Charlotte Bühler (as cited in Rottier, 2009, p. 72–73) are present, including:
    - *Empty worlds* characterised by the use of 35 items or less or one third of the sand tray is empty. This could mean that the world is experienced as an empty and unhappy place; the individual feels rejected and wants to disappear; or is depressed.
    - *Disorganised worlds* characterised by the random, impulsive or chaotic placement of objects and miniatures in the tray. This can be interpreted as experiencing inner turmoil that is a reflection of the person's own world or points out a person's inability to practice self-control.
    - *Aggressive worlds* that have worrying aggressive signs involve aggressive themes of animals devouring other animals or people; or the concealment of objects in the sand; and penning in or crowding

miniatures into a rigid mass. Aggression can also be suspected if a scene has no aggression, but the client acts aggressively in other situations or vice versa.

- *Over-fenced or closed worlds* indicated by exaggerated fencing with no openings or gateways. If most of the miniatures are enclosed, it can show compartmentalisation, a need for self-protection, to isolate oneself from other people, to keep danger out, to fear one's own impulses, and wanting to remain in control.
- *Unpeopled worlds* are without people - and soldiers do not qualify as people. This can portray feelings of hostility and aggression towards other people because of emotional, physical, spiritual and/or sexual wounding, and wanting to escape from people.

3.8.3 INDICATIONS OF TRAUMA IN SAND TRAYS

Cunningham et al., (2000, p. 199–202) differentiated between the sand play patterns of children traumatised by sexual abuse or severe illness and non-traumatised children as follows:

- Sexually abused play patterns:
  - *Miniatures* incorporated into trays averaged 9.3 items. Sexually abused children chose a large rubber snake as the central figure, either visually or thematically, and the snake was often buried in the sand.
  - *Content* was chaotic and trays were characterised by a complete lack of structure and planning as items were randomly chosen.
  - *Themes* of conflict and violence were depicted in trays which revolved around hopelessness, no resolution and no positive outcomes.
  - *Conflict management* was impaired and a lack of conflict resolution was woven into the tray's metaphor – hopeless situations that did not get resolved, stories without endings or stories without justice that left the antagonistic character of the tray unchanged and unresolved.
- Medically-traumatised play patterns:
  - *Miniatures* incorporated into trays averaged 9.2 items probably as a result of motor depression. No snakes amongst chosen miniatures.
  - *Content of trays* was organised as items were carefully chosen and reflected the ability to plan, organise and integrate.
  - *Themes* of conflict and violence were depicted in trays.

- *Conflict management* and conflict resolution were evident in trays.

- Non-traumatised play patterns:
  - *Miniatures* incorporated into tray averaged 46.1 items. No snakes amongst chosen miniatures.
  - *Content of trays* were organised and reflected the ability to plan, organise and integrate.
  - *Conflict management* and conflict resolution were evident in hopeful endings, a sense of justice in play and resolving scenes with conflict.

Gil (1998 as cited in Mathis, 2001, p. 26) applied the concept of dynamic and stagnant play to traumatised children as a way of monitoring positive change. The distinctions are presented in Table 3.1 below.

Table 3.1: Characteristics of dynamic and stagnant post-trauma play

Dynamic Post-Trauma Play	Stagnant Post-Trauma Play
Affect availability	Affect remains constricted
Physical fluidity	Physical constriction
Range of interaction with play	Limited interaction with play
Range of interaction with clinician	Limited interaction with clinician
Play changes or adds elements	Play stays precisely the same
Play occurs in different locations	Play conducted in the same spot
Play includes new objects	Play limited to specific objects
Themes differ	Theme remains constant
Outcome differs and healthy adaptive responses emerge	Outcomes remain fixed and non-adaptive
Rigidity loosens over time	Play remains rigid
After-play behaviour indicates release	After-play behaviour shut-down
Out-of-session symptoms maintain or decrease	Out-of-session symptoms maintain or increase

Note. Retrieved from "The story of a sexually abused child's Sandplay: A single case study," by C. R. Mathis, 2001, Master's thesis, Virginia Polytechnic Institute and State University, Falls Church, VA, p. 26.

Grubbs (1994) examined 'wounded trays' or trays containing the emotional wounds caused by trauma. These trays were overly-wet and contained primitive elements of nature like reptiles, rats, mice, spiders, skeletons and devils. Wounded trays often had

dark, terrifying and painful qualities. According to Mitchell and Friedman (1994), wounded trays often have figurines that are buried or hidden from view and aggressive animals that surround an unprotected child or vulnerable person.

Grubbs (1995, p. 431–436) also compared the Sandplay process of sexually abused and non-abused children. He employed the Sandplay Categorical Checklist (SCC) to analyse the thematic content of scenes and the process involved in creating them, the stories about the scenes, and the progressive and regressive changes that occurred from one scene to the next in the Sandplay process. The differential findings pertaining to the groups include:

- Use of human and animal figures: The sexually abused children created scenes with considerable more violent and evil themes. Some trays involved isolated or war-torn scenes that depicted violent attacks on vulnerable victims and sadistic self-destruction, while flooded scenes showed reptiles and snakes devouring babies or other forms of new life. Violent aggression was displayed during scenes. In contrast, the non-clinical children's confrontation or war scenes were minor and less violent that ended in resolutions shortly afterwards. Family and community themes were portrayed in life-enhancing, congruent and positive ways.
- Structuring of relationships and their interactions: For the non-clinical children, family and community were central to their play, while the sexually abused children portrayed family/community scenes less often, which, according to Grubbs, probably reflected their sense of loneliness and isolation from others. When family scenes were portrayed, the figures in them tended to be alien in appearance, aggressive towards figures around them and violent and destructive. Grubbs also found that the use of animals and human figures accurately reflected the abused children's family situations and presenting difficulties. This implies that the features of the chosen miniatures can indicate how clients experience their family members.
- Setting: The combination of theme and environment constitute the setting and makes up an aspect of a child's worldview. The settings of the abused children were satanic and death-orientated, war-torn or devoid of life. The non-clinical group created settings with family, community, nature and mystical places with actions that involved the hunting and gathering of food, natural and spiritual life challenges, weddings and the bridging of opposites.

- Use of sand and water: The sexually abused children tended to create scenes that were overly-wet, almost soggy, giving scenes a cold and alien-like appearance.
- Boundaries: The sexually abused children created internal and external boundaries that were either continuously invaded by violent and warring factions or were too rigidly defined so that they created isolation from the outside world and between figures in the scenes. Contrary, the personal boundaries of the non-abused children were appropriate and well-defined.
- Movement/obstacles: Movement can portray action, interaction between figures and purposeful direction in sand trays. Movement in the trays of the sexually abused children tended to be stagnant and blocked or invasive and destructive. In contrast, the non-clinical group's movement tended to be clear and open and when blockages existed they were resolved. Bridges often appeared in their trays.
- Uniting of opposites: The sexually abused children were unable to unite opposing symbols or dramatise a unifying theme as they spent excessive time protecting themselves through setting up boundaries, which in most instances were either ineffective or isolating.

Harper (1991, p. 93–97) differentiated between the sand play characteristics of sexually abused, physically abused, physically and sexually abused and non-abused children. The abuse categories with their unique play characteristics are presented below.

- The themes of the sand worlds of the non-traumatised children revolved around family, fantasy and wish fulfilment.
- In contrast, the themes of the traumatised children also contained wish fulfilment which were always transformed into conflict. A need for protection and nurturance were present in all the narratives of the different types of abuse. The sand play experience was stressful for them overall.
- Sexual abuse:
    - *Themes* focussed on sexuality.
    - *Content of trays* were repetitive as sexually abused children would replicate the same structures and themes in their trays. Their trays were also more closed (fenced with no exit) than the other groups and lacked fantasy (very realistic).

- *Play characteristics* of the sexually abused children indicated a need to remain in control of the situation and their behaviour was characterised by good co-operation, responsiveness and involvement to keep the researcher occupied. This group experienced the sand play situation as stressful and was hesitant to tell the narrative of the tray.

- Physical abuse:
  - *Content of trays* were less organised and more action-orientated and ended in conflict or playing out some or other fight, battle or disaster - trays characterised by conflict and chaos.
  - *Play behaviour* was disorganised and the physically abused group seemed restless as if considering fleeing, and struggled to remain calm, to concentrate and to complete the building task. They were verbally challenging and tended to elicit negative reactions from others.
- Physical and sexual abuse:
  - *Themes* were most diverse of all the groups and all the theme categories were present except domestic – sexuality, a need for protection and nurturance, severe aggression, conflict, chaos, and withdrawal.
  - *Content of trays* were most aggressive and disorganised of all the trauma groups. Scenes were characterised by action that started as an adventure but ended in disaster.

Homeyer and Landreth (1998) identified the following play therapy behaviours in sexually abused children:

- Filling and emptying cups of sand repetitively.
- Smearing self with sand.
- Making secret tunnels for hiding.
- Building hills of wet sand and poking holes in each of them.
- Rubbing sand on genitals and thighs.
- Covering genitals and thighs with sand.
- Dripping wet sand on a figure.
- Washing self or parts of body with sand as part of a cleansing ritual.
- Burying aggressor symbols.
- Being in a trance-like state while playing with water and sand or while re-enacting the abuse.

Lagutina et al. (2013) explored the contribution of Sandplay to addressing the psychological aspects of clients with physical problems and illnesses. Sandplay therapists dealing with clients with physical problems in their practices shared their insights and experiences in interpreting sand trays that reflected trauma related to physical problems.

- *Symbolism of dissociation* in sand trays was often indicated by parts of a picture separated by a mound or a water divide, as split opposites such as positive and negative characters opposing each other, or with the split parts sometimes placed in different trays. Freeze dissociation could be linked to themes of frozen landscapes or blocked movement. Symbolism of dissociation in sand trays was often linked to past traumatic experiences.
- *Symbolism of relationship to illness* includes fighting it, feeling terrified and seeking protection. The illness was often represented as dangerous creatures or enemies such as dragons, sharks or spiders. Clients often made representations of operations, treatment procedures, and past traumatic events during sessions.
- *Symbolism of illness-related suffering* involved expressions in the sand of loneliness, isolation, despair, fear, and helplessness.

Zinni (1997, p. 662–667) differentiated between clinical and non-clinical children aged ten and 11 in terms of how they carried out a Sandplay picture task. The clinical group included cases of sexual, physical and/or emotional abuse. The findings are as follows:

- Approach: The traumatised children approached the Sandplay task more haphazardly and would, for example, pick out objects quickly and randomly and throw them into the tray. Scenes were also more chaotic and disorganised, with more random items which Zinni equated to the inner emotional turmoil and pain distressed children experience. Some of the traumatised children were over-stimulated by the number of miniatures and stressed over all the choices that were involved in making a sand scene while others were too overwhelmed to even start the task. Bühler (as cited in Carey, 1999; Mitchell & Friedman, 1994) also found that when traumatic memories are triggered through the handling of miniatures, it can be too overwhelming to start the construction task.
- Content: The traumatised children were more likely to use birds, houses, signs, flags and holiday items, while the non-clinical children used sticks and boats. Zinni thought that the miniatures used probably related to what those particular

items meant to the children or resembled to them. The traumatised children found it more difficult to build meaningful, congruent scenes that corresponded with the theme, title and story of their trays. They often used construction signs or messages (e.g. “Stop” and “Do not enter”) to create worlds with heavily fortified or restricted areas that either needed protection or kept people out. Zinni hypothesised that this might be reflective of their experiences of trauma or abuse and their own need to protect themselves and their boundaries or to be protected by others. Abused children’s boundaries are often violated and they have no control over what happens to them and are powerless to change their circumstances. Traumatised children were less likely to remain within the boundaries of the tray and would often throw sand out of the tray which Zinni described as regressed behaviour.

- Themes: The traumatised group’s sand tray themes revolved around accidents, tragedy and protection, while the non-clinical group constructed domestic, community, and nature scenes. Zinni proposed that these negative themes were most likely related to feelings of loss of control and the high emotional load of the problems they had to cope with.

3.8.4 INDICATIONS OF COPING DIFFICULTIES IN SAND TRAYS

Cockle (1993, p. 12–15) differentiated between coping (CG) and difficulty-coping groups (DCG) of children in terms of their patterns of play themes, play characteristics, object use and narratives to ascertain the assessment and therapeutic value of the Sandplay technique. Coping children were distinguished from their difficulty-coping counterparts by meeting the criteria of getting along with teachers and peers as well as mastering the academic skills applicable to a particular grade level.

- Sandplay characteristics: In comparison to the CG which had no problem working within the boundaries of the sand tray, the DCG exceeded the boundaries (not normal after age three), used both trays in a single session, talked constantly, and took very long to finish which suggest that the group had trouble coping and adhering to boundaries. Cockle is of the opinion that the emotional concerns of the DCG are possibly overwhelming and difficult to contain so that the children must use every opportunity to express their emotional needs and perceptions. The CG created static sand worlds and engaged in one continuous process without changing ideas which reflected their inner calmness and stability. The DCG created active worlds that, according to

Cockle, might indicate coping difficulties as these children experienced pressure from emotional issues resulting in increased psychic energy that got released in the sand tray during the construction process. Added to this was the tendency to repeatedly change ideas which, Cockle hypothesises, could indicate that various emotional issues were fighting for expression and/or that strong ego defences would not allow 'unsafe' emotional issues to surface into consciousness and these issues were changed quickly and expressed in another format. This need to hide feelings, issues or undesirable parts of the self might be linked to the high incidence amongst the DCG of burying objects in the sand. Cockle also referred to Bowyer's (as cited in Mitchell & Friedman, 1994) observation that the burying of objects after the age of five indicates emotional problems.

- Object usage: The DCG used scenery significantly less than the CG, which, for Cockle, suggested that the children in this group viewed both their internal and external worlds as deficient in life and growth. Their limited use of transportation might have highlighted the fact that they did not experience a sense of movement and progression. The males in the DCG frequently used military objects in trays that, to Cockle, could indicate a possible way in which they met their need for personal power by acting aggressively towards others. The DCG frequently substituted domestic animals for fantasy and family figures which is in line with the typical sand play behaviour of the two to four-year age group (Bowyer as cited in Mitchell & Friedman, 1994) and might indicate delays in emotional development. The figures and animals used by the DCG were usually of a fierce nature which might indicate that their perception of the world is more threatening and dangerous when compared to that of the CG. The significantly greater use of houses in the CG could show a readiness to focus on and deal with family life, whereas the DCG might have felt too threatened by these themes.
- Sandplay themes: Themes involving struggle, death and destruction dominated in the sand worlds of the DCG which could suggest a more primitive level of struggle which is associated with the struggle for daily survival. The abundance of fantasy themes in the CG could be due to the fact that these children were relatively free from serious concerns and, thus, could use their emotional energy for creativity and imagination. The CG also portrayed themes of dependency consistently, which Cockle viewed as developmentally appropriate in that children must rely on others for guidance and support. This was in stark contrast

to the DCG's lack of dependency on others that, according to Cockle, might be linked to previous experiences of being let down that taught these children not to place importance on the support and guidance of people in their lives, but rather to become emotionally self-reliant and detached.

- Sand world characteristics: The CG had more balanced, vital, peopled and organised worlds, whereas the DCG had more unpeopled, barren and unbalanced worlds. Cockle links this finding, firstly, to the 'normal' sand worlds of younger age groups - which again could indicate emotional immaturity, and, secondly, to barrenness in the DCG's inner and outer worlds that lack growth, life and health.
- Narrative analysis: In general, the CG relayed narratives with meanings of hope, personal power to overcome obstacles, optimism about the future, and faith in other people for the fulfilment of their needs. In contrast, the DCG relayed stories with meanings of despair, disempowerment, pessimism about the future, and hopelessness. In instances where narratives showed glimmers of hope and personal power, better outcomes for the future resolution of issues are predicted.

3.9 CONCLUSION

In this chapter I provided an overview of the Sandplay method, established its practical applicability with traumatised youths within a rural context, and identified indications of trauma in Sandplay literature that can facilitate the understanding of sand tray scenes.

In Chapter 4, I discuss the empirical aspects of my research study and, throughout this process, attempt to justify my methodological choices in relation to the research questions.

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CHAPTER 4
RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The second and third chapters took the form of a literature review, according to which I planned and conducted my empirical study. Chapter 2 discussed the traumatisation of youth within the South African context and Chapter 3 reflected on Sandplay as an expressive-projective modality for trauma.

In this chapter, I focus on the empirical aspects of the study by explaining the manner in which the study was planned and conducted. I begin this chapter by discussing the paradigmatic perspectives that guided the investigative process. Secondly, I pay attention to the research methodology that I implemented in terms of my research design; the research group; and the way in which the data was collected, analysed, and interpreted. Lastly, I refer to the vigour of my study and the ethical considerations that guided me throughout the research process.

4.2 PURPOSE OF THE STUDY

As established, adolescence is an important developmental period marked by various biological and psychological changes in concert with increased independence, romantic involvement, and forming an identity as preparation for adulthood (Doyle & Perlman, 2012). Moreover, adolescence is a particularly vulnerable age group for trauma histories to manifest and present psychological difficulties (Lam et al., 2015). In many instances, teens living in low-resourced or rural communities have been exposed to multiple traumas, enduring deprivation and the impending threat of violence and crime in their schools, homes and communities (Eagle & Kaminer, 2015). Clearly, finding appropriate ways to screen for trauma in these vulnerable populations were a matter of urgency.

The purpose of the study was *to explore the ways in which a rural school youth indicated trauma in a single sand tray scene.* It was envisioned that the outcomes of this research project would contribute to increasing cross-cultural assessment options that would allow educational psychologists serving rural schools to screen for trauma with a single sand tray to ensure appropriate therapeutic intervention for distressed youths.

4.3 PARADIGMATIC PERSPECTIVES

4.3.1 EPISTEMOLOGICAL PARADIGM

Research has been described as a systematic investigation or inquiry whereby data is collected, analysed and interpreted in some way in an attempt to "understand, describe, predict or control an educational or psychological phenomenon or to empower individuals in such contexts" (Mertens, 2005, p. 2). Nonetheless, the exact nature of how research is defined and practised is influenced by the researcher's epistemological paradigm or interpretive framework (Ferreira, 2012; Mackenzie & Knipe, 2006). The assumptions that constitute research paradigms are based on the researcher's ontological, epistemological and methodological conjectures about important aspects of social reality (Mack, 2010; Snape & Spencer, 2003). The researcher's response to the questions: 1) what is the nature of reality and what can be known about it (ontology), 2) what is the nature of knowledge and what is the relation between the inquirer and the known (epistemology), and 3) how can the researcher go about acquiring the desired knowledge (methodology) set down by the nature of the research enquiry (Snape & Spencer, 2003). I conducted my study according to the *interpretivist paradigm*, following a qualitative approach.

As an interpretive researcher, firstly, I adopted a relativistic ontology. This implies that no single, objective external reality exists, but rather that each person experiences reality from their own point of view as they interpret and interact with their social environment, ensuing in multiple realities and many truths (Mack, 2010; Nieuwenhuis, 2007a). Secondly, I chose to support a subjective epistemology that postulates that knowledge is established through the meanings people attach to the phenomenon studied and that knowledge is context and time dependent (Krauss, 2005). Only by interacting with research participants can the researcher learn more about their perspectives, and this interactive process changes all parties involved (Snape & Spencer, 2003). Lastly, I believed that following a naturalistic methodology that makes use of qualitative research methods such as document reviews can assist the researcher to understand how participants interact with and interpret their social world (Delport, Fouché, & Schurink, 2011; Snape & Spencer, 2003).

I regarded interpretivism as a suitable epistemological paradigm for my study as I wanted to explore the unique ways in which a rural school youth manipulated the sand and miniatures to communicate traumatisation. As reality is socially constructed using

langauge and symbols, attaining authentic knowledge was dependent on the researcher's familiarity with the rural context and its unique physical and social challenges as well as with African symbolism and conventions (Mack, 2010). As an interpretive researcher, I acknowledged a rural school youth's personal sand constructions and meanings as authentic and credible expressions of traumatisation that must be taken seriously. I, thus, rejected the concept of an absolute universal truth in favour of a multi-verse of local or indigenous realities. The decision of generalising the research findings to a larger population was deferred in favour of my pursuit to identify a distinct set of indicators that could reveal the trauma experienced by an adolescent living in a low-resourced community in South Africa (Mack, 2010).

4.3.2 METHODOLOGICAL PARADIGM

The nature of the research study determines the research approach to be followed Creswell (2009). I opted for a *qualitative approach* to conduct my study as this approach endeavours to describe and understand social phenomena within its natural setting (Leedy & Ormrod, 2014). Clearly, this approach was better suited to study complex human issues and circumstances such as trauma which occurs within the challenging South African rural context with its limited resources and opportunities (Fouché & Delport, 2011; Leedy & Ormrod, 2014).

Creswell (2009, 2014) and Morgan and Sklar (2012) identified the following core characteristics that discern qualitative research from a quantitative methodology. By discussing these features, an attempt is made to tie the current study to these characteristics and to demonstrate the qualitative nature of the research project.

- Qualitative research is practised in natural settings that engage the social and cultural contexts where human behaviour or events occur. Bringing the rural context, with its unique physical and social constraints, into the study was critical for the positioning of my research.
- Qualitative research focuses on obtaining the meanings that participants give to their experiences about their world. As mentioned, this study aimed to discover the distinctive ways a rural school youth indicated trauma in a single sand scene by exploring her personal sand constructions and the meanings she ascribed to these through her story that she told about the scene. By comparing research findings against indications of trauma in Sandplay literature and employing

member checking with a Sandplay therapist the research findings could be substantiated (Creswell, 2009).

- The data that emerges from a qualitative study is descriptive in nature and is reported primarily in participants' own words or pictures as was the case with this study (Denzin & Lincoln, 2011). An example of this, I give by relaying the meaning of requiring protection implied in a part of the participant's Sandplay story: *"Made a garage for parking the cars. The cars to be protected. In our area no more garages. I need to be the one to make garages for community*".
- Idiographic interpretation was applied, which means that attention is paid to particulars and data is interpreted with regard to the particulars and uniqueness of the case rather than the general. As indicated, the focus of the study was not to generalise findings, but to explore the unique ways trauma was indicated in a single sand scene of a rural school youth.
- Both inductive and deductive data analyses were utilised to build a comprehensive set of themes/ideas that reflected the database.
- Multiple data sources were used to gather information rather than relying on a single data source as each data source further enriched the understanding of the issue at hand. Biographical data, visual data, original assessment data, observations and therapeutic notes are examples of the data sources included in this study.
- Qualitative research is reflective in that researchers reflect on how their role and personal biography can influence the interpretation and reporting of data. This posed the challenge of dealing with my own subjectivity and remaining cognisant of my own trauma history and Westernised ideas of trauma as an individual experience rather than a collective one. Additionally, I reflected on fulfilling more than one role which could have posed an ethical dilemma to the study – apart from acting as researcher, I was also the facilitating student-therapist for the client from which the research data was obtained. By verifying my understanding and interpretation of the data with my supervising psychologist and relevant literature, I addressed and overcame these challenges (Denzin & Lincoln, 2011).

4.4 RESEARCH METHODOLOGY

4.4.1 CASE STUDY AS RESEARCH DESIGN

A research design is employed to descibe the procedures of carrying out a study and to "assist with finding suitable answers to research questions" (Cohen et al. as cited in Maree & Van der Westhuizen, 2007, p. 33). For the purpose of my study, I utilised a *clinical case study* design. The term 'clinical' does not necessarily refer to medical studies, but to research that is conducted within a professional context, such as the field of Educational Psychology. The defining features of case study research are that it constitutes an in-depth investigation of a 'case' or a bounded system made possible through the use of multiple data collection methods or sources (Johnson & Christensen, 2012; McLeod, 2010; Mertens, 2010; Silverman, 2010; Slavin, 2007; VanderStoep & Johnston, 2009). The intent of case study research is to provide an accurate description or reconstruction of a case within its complex context rather than to generalise the findings to a broader population (Flick, 2009; McLeod, 2010; Mertens, 2010; Payne & Payne, 2004). Kyburz-Graber (2004) points out that case studies are particulary suited to answer more intricate 'how' and 'why' research questions as well as for learning more about a phenomenon that is poorly understood or about which little is known. Choosing this type of design enabled me to answer the complex question: How do a rural school youth indicate trauma in a single sand tray scene? By answering this intricate question, the manner in which a school youth that was part of a low-resourced community might indicate trauma in a single sand scene would be better understood as this phenomenon had not been studied before. The gained insight could be applied to the field of cross-cultural assessment and stimulate further research in this area.

4.4.2 STRENGTHS AND CHALLENGES OF A CASE STUDY RESEARCH DESIGN

Rule and John (2011) are of the opinion that the case study approach's strengths resides in its deepness, flexibility, versatility and manageability. Flick (2009, p. 134) agrees that its main contribution is that it "captures the process under study in a very detailed and exact way" and thus enables the researcher to look at a particular case or cases in a great deal of depth rather than focussing on several instances superficially (Payne & Payne, 2004). It can also employ a wide range of methods for collecting and analysing data depending on the nature of the case, which adds to the flexibility of this design (Nieuwenhuis, 2007b; Slavin, 2007; VanderStoep & Johnston,

2009). The research study took advantage of the flexibility of this design by employing multiple data sources to provide a multiplicity of perspectives and using inductive and deductive approaches in analysing the data (Kyburz-Graber, 2004).

One of the main criticisms of the case study design is that concentration on a limited number of cases often leads to problems with generalisation (Flick, 2009; Nieuwenhuis, 2007b; Slavin, 2007). However, Nieuwenhuis (2007b, p. 76) underlines the fact that generalising is not the intent of case study research, but that it is aimed at "gaining greater insight and understanding of the dynamics of a specific situation" or issue which, in this case, was recognising the distinctive ways in which a traumatised rural school youth expressed the accompanying feelings and experiences through Sandplay.

4.4.3 UNIT OF ANALYSIS

Monette et al. (as cited in Fouché & De Vos, 2011, p. 93) emphasise the importance of specifying the unit of analysis correctly, as this will be "the element about which data is collected and inferences made". The unit of analysis in this study was the case *record of a Grade 9 learner in a rural school community in Mpumalanga*.

4.4.4 REFLECTION ON THE ROLE OF THE RESEARCHER

As mentioned before, consideration of the influence of the researcher's perspective forms part of the distinct reflective character of qualitative research (Creswell, 2009, 2014). Pondering the fact that the researcher fulfilled dual roles as both the researcher and the facilitating student-therapist for the clients in the FLY - rural school practicum from which the data for this study was obtained, brought ethical and best practice concerns to the foreground. In light of best practice, it is worth mentioning that these roles did not overlap in time-frame as the researcher role followed at least 18 months after the completion of the career counselling intervention that was discussed in Section 1.1 of Chapter 1. While the client's parental consent to the intervention also pertained to my using the data for research purposes, my role as facilitator came about first, and remained independent of my role as researcher. In order to address concerns of bias and increase the trustworthiness of the research study, member checking with the supervising psychologist was employed (Anfara, Brown, & Mangione, 2002).

4.4.5 SELECTION OF THE PARTICIPANT AND SAMPLING PROCEDURE

Sampling implies that the researcher must make a series of strategic choices about with whom, where and how to do the research (Vithal & Jansen, 2010).

4.4.5.1 The research context

A secondary school in a low-resourced area in Mpumalanga with its Grade 9 learners were chosen by means of *convenience sampling*. This implies that the population elements were conveniently available and easily accessible as they formed part of the academic service learning part of the FLY-Project that was prescribed by the Master's Programme in Educational Psychology (Maree & Pietersen, 2007; Ritchie, Lewis, & Elam, 2003).

4.4.5.2 Selection of the participant

I employed *convenience sampling* to choose my own group that included the six learners that I had provided subject choice and career guidance services to during the rural school practicum in 2013. After that, I utilised non-probability *criterion-based sampling* to select one case record which is in line with qualitative research that favours small-scale, in-depth studies (Ritchie et al., 2003).

According to Maree and Pietersen (2007), criterion-based or purposive sampling is the appropriate sampling technique when the researcher has a particular purpose in mind and the participants must meet specific criteria to be included in the sample. Ritchie et al. (2003, p. 78) concur that the sample units are chosen "because they have particular features or characteristics which will enable detailed exploration and understanding of the central themes and puzzles which the researcher wishes to study". The purpose of the study was to explore the ways in which a rural school youth indicated trauma in a single sand tray scene. To attain this purpose, the participant had to meet the first sampling criterion related to the socio-demographic feature of being a school-attending youth living in a rural community and the second sampling criterion of having experienced significant trauma. Of the six cases, I selected the case that, according to my judgement, fitted the sampling criterion best. The case in question had a complex trauma history that involved abandonment by the mother at a young age, maltreatment by relatives and neglect while growing-up, failing the previous school-year, harassment at school, experimentation with drugs/alcohol and abuse occurring at the time of the assessment. Strydom (2011, p. 232) explains that, in criterion-based sampling, the

selection of participants is based "entirely on the judgement of the researcher, in that a sample is composed of elements that contain the most characteristic, representative or typical attributes of the population that serve the purpose of the study best". By choosing this type of sampling method, I could purposefully contribute to a better understanding of the research problem (Creswell, 2009; Morgan & Sklar; 2012). By identifying indicators of trauma in the sand that could be applied to the South African rural context with its unique challenges, cross-cultural assessment and research could be advanced.

The limitation of purposive sampling is that findings cannot be generalised (Morgan & Sklar; 2012). The researcher addressed this problem by clearly defining the sampling criteria to increase transferability. By choosing a participant that represented the salient characteristics of my study best, I also added to the precision and rigour of my qualitative research sample (Ritchie et al., 2003).

4.4.6 DATA COLLECTION AND DOCUMENTATION

In order to address the primary research question, I utilised *document study* or *documentary analysis* as my data collection strategy. The fact the data had already been documented implied that the documentation of data was not relevant here.

According to Strydom and Delport (2011, p. 378), a document study "enables the qualitative researcher to investigate people, events and systems in-depth by analysing authentic written material". This study examined an archival record referring to the case record of a Grade 9 learner that received subject choice and career guidance services during the rural school practicum FLY-initiative. The case record can be classified as a primary source of documentation as it contained the original assessment material of the participant which included the Sandplay activity, biographical questionnaire and projective-expressive media as listed in Table 4.1 (Strydom & Delport, 2011). The case record also contained secondary sources of documentation referring to the therapeutic notes and interpretation of the original assessment material by the student-psychologist. The behavioural observations made by two first-year MEd students who assisted during the Sandplay activity and two formal letters from the University notifying the learner (participant) and School that abuse was suspected, were also included here. An electronic version of the case record is supplied.

The case record contained the following document sources that were included in the research study:

Table 4.1: Primary and secondary document sources

Primary document sources	Secondary document sources

• Sandplay activity:
  ○ Visual data – a photograph of the completed sand picture
  ○ Transcription of the story the participant provided about the sand picture
• Biographical questionnaire
• Projective-expressive media:
  ○ Draw-A-Person Test
  ○ Circle of Influence Activity
  ○ Incomplete Sentences
  ○ Adolescent Düss
  ○ Role Model Activity
	• Behavioural observations made by two first-year MEd students during the Sandplay activity.
	• Therapeutic notes of student-psychologist containing Sandplay observations as well as an analysis and interpretation of the original assessment material.
	• Asset map.
	• Official notification letters of suspected abuse to:
	  ○ The learner (participant)
	  ○ The principal of the school

Seabi (2012, p. 92) warns that the disadvantage of documentary methods is that they are largely biased for they represent the views of the author who wrote them. Clearly, it is imperative to the researcher that the authenticity, representativeness, meaning, completeness and credibility of documents be verified (Strydom & Delport, 2011). In considering the authentic nature of the case record, it contained several primary document sources referring to the participant's original assessment data and the origin of the case record was known. The representativeness of the case was addressed by selecting the case that met the selection criteria best. With reference to the completeness and credibility of the case record, the fact that the student-psychologist who conducted the original assessment, analysed, and interpreted the assessment material was busy with second-year Master-level training in Educational Psychology infers a certain level of competence. The information in the case record was also checked, evaluated and signed off by the supervisory Educational Psychology lecturer which should further endorse the completeness and credibility of the case record. That being said, the fact that the researcher also fulfilled the role of student-psychologist during the initial assessment and could, therefore, be a source of bias would be addressed by reporting shortcomings in the collected data.

4.4.7 DATA ANALYSIS AND INTERPRETATION

In analysing and interpreting the data a number of steps were followed.

Firstly, I familiarised myself with the data by reading and rereading it and making notes about initial ideas. Even though the original assessment data had been analysed and interpreted by the student-psychologist, I used both the original data and the processed results to ensure that the data analysis and interpretation were accurately and thoroughly done.

Secondly, I used the main considerations which Mitchell and Friedman (1994) found to be common practice amongst the majority of Sandplay therapists for understanding sand trays as an interpretive framework to guide and structure the analysis and interpretation of the single sand scene. These considerations pertained to: 1) the case history and external situation of the participant, 2) how the scene was created, 3) the feeling response of the interpreter to the scene, 4) the Sandplay story, and 5) the content of the scene.

I also considered some of the points suggested by Martin Kalff (as cited in Turner, 2005) in the analysis of Sandplay to understand the psychological communication in a scene, including:

- Session contents pertaining to the interaction between the client and student-psychologist as well as the verbal and non-verbal expressions from the client during the assessment session.
- The manner in which the client interacted with the sand.
- The symbolic content of the scene.
- The figures used and the manner in which they were used in the scene.
- The manner in which the figures were arranged and the sand was shaped in the scene.
- The colour that dominated the scene and its meaning.
- The manner in which the client used the blue bottom of the tray.
- The relationships between figures and the elements of the scene.
- The dynamic or static quality of the scene.
- The use of boundaries in the tray.
- The dominant theme of the scene.
- The level of consciousness or unconsciousness of the scene.

Thirdly, both deductive and inductive approaches were followed for the purpose of data analysis and interpretation. A deductive approach was followed in that predetermined indications of trauma found in the Sandplay literature in Chapter 3 were used to analyse and interpret the sand scene and sand play behaviour. For example, Sandplay literature (Harper, 1991; Zinni, 1997) recognises a fenced-in tray as indicative of possible sexual abuse which was then applied to the participant's tray. An inductive approach came into play when the assessment data was used to form a picture of the inner life and outer world conditions of the participant to establish a context for assigning certain meanings to the Sandplay scene (Turner, 2005). An example of this approach is that, when the assessment data suggested potential abuse, it provided the context for interpreting a particular sand configuration to mean male genitalia rather than a dividing wall. Throughout the process, I relate my findings back to the reviewed literature.

Fourthly, verbatim responses from the assessment data were given where applicable.

4.5 QUALITY CRITERIA / TRUSTWORTHINESS OF THE STUDY

In contrast to quantitative research that requires a study to meet the rigorous criteria of validity and reliability, qualitative research entails meeting the *quality criteria* of *credibility, transferability, dependability* and *confirmability* to ensure the *trustworthiness* of the study (Di Fabio & Maree, 2012). Various strategies were employed to enhance the trustworthiness of this study.

- *Credibility* corresponds with *internal validity* (positivist paradigm) and focuses on whether or not the researcher accurately reconstructed and represented the views of the participant and the reality of the context studied (Anfara et al., 2002; Schurink, Fouché, & De Vos, 2011). By providing detailed descriptions which illustrated the complexity of variables and interactions, the study automatically received credibility as it became deeply embedded in the rural context. By employing triangulation whereby different data sources such as the sand tray scene and Draw-A-Person test were compared, credibility and crystallisation were enhanced (Anfara et al., 2002; Creswell, 2012). A Sandplay therapist was also involved here.
- *Transferability* is similar to *external validity* (positivist paradigm) and considers whether or not the findings of the research study can be applied to another

context or case (Anfara et al., 2002; Schurink et al., 2011). Providing detailed descriptions and employing purposive sampling increased the applicability of the research findings to other settings (Anfara et al., 2002; Schurink et al., 2011).

- *Dependability* corresponds with *reliability* (positivist paradigm) and ensures that the research process is logical and well-documented (Schurink et al., 2011). One way to improve dependability is by means of triangulation (Kyburz-Graber, 2004). This means comparing multiple data sources, which in this case included biographical data, official letters, assessment data, visual data, and observations (Creswell, 2012). Another way in which to do this was to use a case record of which the content is comprehensive and accurate (Di Fabio & Maree, 2012).
- *Confirmability* matches up *w*ith *objectivity* (positivist paradigm) and considers whether or not the research findings can be replicated (Di Fabio & Maree, 2012; Schurink et al., 2011). Strategies used to address confirmability in the research process included making use of photographs and triangulation. Additional ways in which to ensure confirmability were for the researcher to practise reflexivity by clarifying her role right at the beginning of the study and by employing member checking with the supervising psychologist (Anfara et al., 2002).

4.6 ETHICAL CONSIDERATIONS

The following ethical considerations were taken into account during the study (Creswell, 2009; King, 2010):

- *Privacy, confidentiality* and *anonymity:* I respected the privacy of the participant by being sensitive to confidentiality and anonymity issues. Personal or identifiable information was anonymised as early as possible and the photograph of the participant's sand tray excluded her name and face. The collected data would be kept safe for a period of fifteen years.
- *Protection from harm:* Due to the sensitive nature of the research findings, the researcher could not verify them with the participant as the researcher feared that the participant might be re-traumatised and harmed emotionally. The researcher verified the findings and conclusions by consulting colleagues/experts, relevant literature and by comparing different data sources.
- *Role confusion* and *dual roles*: The fact that the researcher fulfilled dual roles as student-psychologist and, later, researcher could have become an ethical

issue. In order to separate these two roles and prevent bias, the researcher verified the findings and conclusions of this study with colleagues/experts and consulted relevant literature.

- *Using data for its intended purpose*: The researcher ensured that the data was only utilised for the purpose that it was supposed to fulfil.
- *Objectivity* and *integrity of the research:* The researcher reported findings fully and did not misrepresent the results of this study in any manner.
- *Obtaining ethical approval:* Ethical approval for the research study was obtained via the Faculty of Education Ethics Committee.

4.7 CONCLUSION

In this chapter I explained the various aspects of planning and conducting my empirical study. I started by discussing the paradigmatic perspectives that motivated the way in which I conducted this study. I described my research methodology with reference to the research design, research group, data collection strategies, and process of data analysis and interpretation. Lastly, I reflected on my role as researcher, and also discussed the quality criteria of the study and the ethical issues I considered during my study.

In the following chapter, I report the findings of my study.

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CHAPTER 5
FINDINGS AND INTERPRETATION

5.1 INTRODUCTION

In chapter 4, I explained how I planned and conducted my empirical study. I also related my research design and my methodological choices to my purpose statement and research questions.

In this chapter, I report back on the findings of the study and interpret them. I analyse and interpret a single sand tray scene in detail by: 1) using the case history and external conditions to create a context that will assign certain meanings to the Sandplay scene, 2) comparing the findings from the Sandplay scene with the pre-determined indications of trauma in the Sandplay literature, 3) integrating relevant trauma literature, and 4) comparing the findings with the results of a projective test namely the Draw-A-Person test (DAP).

5.2 ANALYSIS AND INTERPRETATION OF A SINGLE SAND TRAY SCENE

To analyse and interpret a single sand tray scene, I consider the case history and external situation, the manner in which the scene was created, the researcher's feelings about the scene, its story, and its content (Mitchell & Friedman, 1994). Additionally, I reflect on some of the points suggested by Martin Kalff (as cited in Turner, 2005) to understand the psychological communication in the sand tray scene.

5.2.1 CASE HISTORY AND EXTERNAL SITUATION

An analysis of the original and interpreted assessment data formed a picture of the external situation and inner life of the participant which provided a context for assigning certain meanings to the Sandplay scene (Turner, 2005). The Circle of Influence Activity, Incomplete Sentences, Adolescent Düss, Role Model Activity, DAP, Biographical Questionnaire, Asset Map, therapeutic notes and official notification letters were used for this purpose. The name, Noku, will be used to refer to the participant in the case. Noku is a 16-year-old girl in Grade 9 at a secondary school who was assessed for career guidance and subject choice purposes.

5.2.1.1 The people in Noku's life

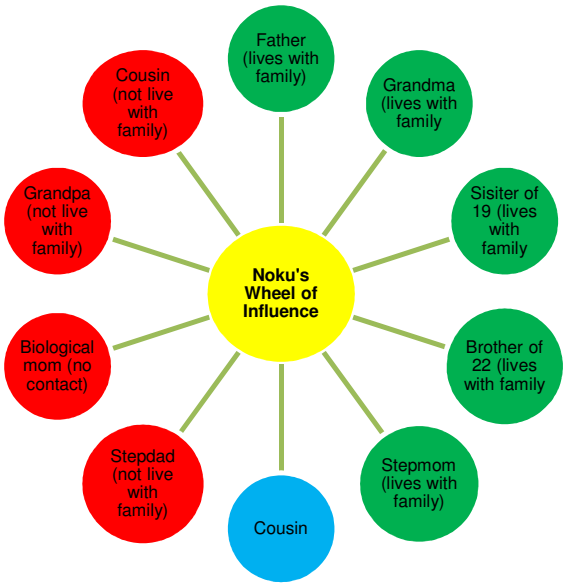

Figure 5.1: Circle of Influence Activity. Compiled from original assessment data

Based on the Circle of Influence presented in figure 5.1 above, Noku was the youngest in her family that consisted of her father, stepmother, brother (22), and two sisters (19, 26). Her grandmother also lived with them, and she described her family as supportive and caring. Both Noku's father, who was working in construction, and her eldest sister, who was a security officer, took care of her. She was also quite close to her stepmother who had raised her as her own daughter, as illustrated by Noku's statement: "*She grow me up even when I am a baby...she give me the love and educated me about respect*". According to the Asset Map, these loving relationships (indicated in green in the Circle of Influence Activity) formed part of the external resources that Noku could count on for support and protection. She described her oldest sister in the Role Model Activity as someone who "*protects me in the past when my mom leaves me in 2001 to sit with my father*", which confirmed this.

The red circles of the Circle of Influence Activity indicate that Noku had been hurt and victimised by people close to her - these hurtful relationships were indicated as environmental challenges or risk factors in the Asset Map. Noku had had no contact with her biological mother who left the family when she was approximately two years old. In the Incomplete Sentences, Noku wrote: *"My mother leave me for the past 10 years old and I didn't know where is she and even now I don't know her"*. She seemed to blame and resent her mother for leaving them as *"bad things happened*" to her

because her mother was not there to look after and protect her. Noku had also been harmed by some of the male figures in her life whom she trusted, including her grandfather, stepfather and, potentially, her brother. During the assessment, she relayed incidences of maltreatment such as: "*My grandfather beats and shouts at us and discriminates us not his children*" (Circle of Influence Activity) and, "*Because I was so stressed what my brother did to me, my friend says I must take that drugs I would feel better"* (Adolescent Düss). The case record also contained two official notification letters of which the first was a letter informing Noku that during the assessment the student-psychologist became aware of the fact that she was most likely being abused and that this was a serious matter that had to be reported to the school. The second letter was addressed to the school principal, alerting the school of the suspected abuse and requesting the school to take the necessary action steps to address the situation. The student-psychologist had discussed this process with Noku as she had to consent to it. Even though Noku consented she did not elaborate on what had occurred. The researcher is aware of the fact that some of the assessment information is unclear or incomplete, as Noku most likely found it difficult to talk about the traumatic experiences she had endured in her life.

5.2.1.2 Living conditions

According to the Biographical Questionnaire, the family lived in a rural village in Mpumalanga. The area did not have any health services. The family consisted of seven members who lived in a three-room house with electricity, but no running water. They used a car for transport.

5.2.1.3 School life

Based on the Incomplete Sentences, Adolescent Düss and therapeutic notes, Noku's school life was filled with many worries and insecurities. Even though she indicated that she enjoyed school and wanted to work hard and do well academically, she worried a lot about failing that year and what her peer group thought of her since she was re-doing grade 9. The fact that Noku had failed and her friends had progressed to the next grade made her feel ashamed and self-conscious. About her biggest fear, Noku wrote: "*My fear is that last year I failed Grade 9. So I am so embarrassed according to me because they are on grade 10 and in this year I need to pull up my socks and work very hard for my school work, not for friend*". Noku came across as insecure and anxious, and having a poor self-image and feeling inadequate. This

conclusion is based on her response when asked what she would do if she failed a test: "*I am not happy because it gives the fear because it looks like I don't know anything and even they are going to laugh at me always, everyday*". Noku also appeared to struggle to get along and fit in with her peers, and she was often ridiculed for her poor academic abilities.

5.2.1.4 Recreational activities and friends

Noku was good at sports and enjoyed playing chess and listening to music. According to the Incomplete Sentences and Adolescent Düss, Noku was mixed up with the wrong crowd of friends and experienced peer pressure to abuse drugs - "*I am scared when my friend tell me that I can use drugs to keep me on thinking because I was so stressed and she always told me that I must addicted to drugs*". It is plausible that she used alcohol and drugs and visited taverns with her friends as a way of dealing with her problems, or avoiding them. Noku attributed her failing the previous year to the fact that she had focussed too much on her friends and not on her school work. She most likely craved acceptance and was easily influenced by others, and, therefore, she probably got involved with the wrong friends and in the wrong activities.

5.2.1.5 Noku's inner life

An analysis of the Incomplete Sentences, Adolescent Düss, DAP and therapeutic notes, depicted Noku as a teenage girl who most likely was unsure of herself, her own sexual identity and capabilities. She appeared to have low self-esteem and felt worthless, anxious, self-conscious and ashamed of who she was. Noku in all probability experienced herself as inadequate (infantile), unable to achieve in her schoolwork and without direction in life. Relationship issues and feelings of abandonment, distrust, betrayal, anger and resentment were also evident. A strong need to belong and to feel accepted and safe was a conceivable motivator for her behaviour. Noku seemed to be struggling to establish an identity which also pertained to her sexuality. She came across as more mature than the other girls in her grade, probably due to her older age. The ensuing features of the DAP (Fig. 5.3) were taken into consideration during the analysis of Noku's inner life (Van Niekerk, 1999):

- Drew opposite gender first and drawing looked like a man (sexual identity confusion)
- Repeatedly erased without improvement in the drawing

- Used short sketchy lines
- Figure was positioned in the middle to the left of the page
- Tiny size of the figure
- A chair as an accessory
- A sitting figure
- Mouth drawn with teeth
- Buttons emphasised

The following observations about Noku's personal history and external situation could almost certainly be relevant to understanding her Sandplay scene:

- Abandonment by her biological mother at around age two.
- Doing Grade 9 for the second time. It is highly probable that this is not the first time Noku has failed a grade when considering her age.
- Noku is ridiculed (bullied) by her peers and teachers at school for her poor academic performance.
- Growing up with extreme economic hardship, and, therefore, neglect.
- Incidences of maltreatment by trusted male figures while growing up that probably entailed emotional, physical and sexual abuse.
- Suspected maltreatment or victimisation (e.g. sexual assault or sexual abuse) by her brother or another male figure in her life at the time of the assessment.
- Involvement with the wrong friends who seemed to pressure her to use drugs and alcohol.
- Puberty problems that relate to identity confusion. Noku seemed to be struggling to figure out who she was, where she belonged and what she wanted to attain in life. Sexual identity issues could also form part of puberty problems which is often the case when identification problems with the mother figure (own gender) is experienced due to a conflicting or absent relationship or sexual trauma. Confusion about sexual identity can result in the questioning of own gender and sexual orientation.
- Substance abuse, re-victimisation, academic failure, peer conflict, relational difficulties, poor self-esteem, low self-efficacy, identity confusion, lack of direction, emotional distress, anger, shame, anxiety, uncertainty, distrust, and feeling confused are all conceivable trauma-related symptoms or issues.

5.2.2 THE MANNER IN WHICH THE SAND TRAY SCENE WAS CREATED

According to Mitchell and Friedman (1994, p. 84), "a great deal of therapeutic and diagnostic information can be gleamed from the manner in which the client creates his or her sand picture". By analysing the session content, Noku's interaction with the sand and where she stood in relation to the tray, important inferences about how the tray was created and its relevance to trauma can be made.

5.2.2.1 Session content

The interaction between the therapist and client as well as the verbal and non-verbal expressions from the client during the session can provide important information for understanding the meaning of a Sandplay scene (Mitchell & Friedman, 1994; Turner, 2005). The session content is based on the observations made by the student-psychologist and two first-year MEd students. The researcher is aware of the fact that certain valuable information from observation might have been missed during a group activity as attention was divided between the various participants.

The student-psychologist (assessor) recorded the following observations during the group Sandplay activity:

- Noku immediately started building with her hands in the sand and repeatedly built and broke down sand structures. She built vigorously without stopping as if she could not get enough of the sand. Noku was still building when the group was told to stop as the time was up.
- By the time Noku had finished her tray, she had gone through at least four or five scenes or phases of building.
- Noku ignored the assessor during the session and did not try to engage with her while building.
- Upon completion of the Sandplay activity, Noku was asked what she had been feeling while she was building the scene and she replied: "Happy".

The first-year MEd students made the following observations during the group Sandplay activity:

- Noku connected with the sand with her hands only for a long time.
- She started to place figurines, and then broke up the tray. Again, she used only her hands in the sand and built walls.

Figure 5.2 is a photograph of Noku's completed Sandplay scene that was taken by the assessor directly after the Sandplay group activity had ended.

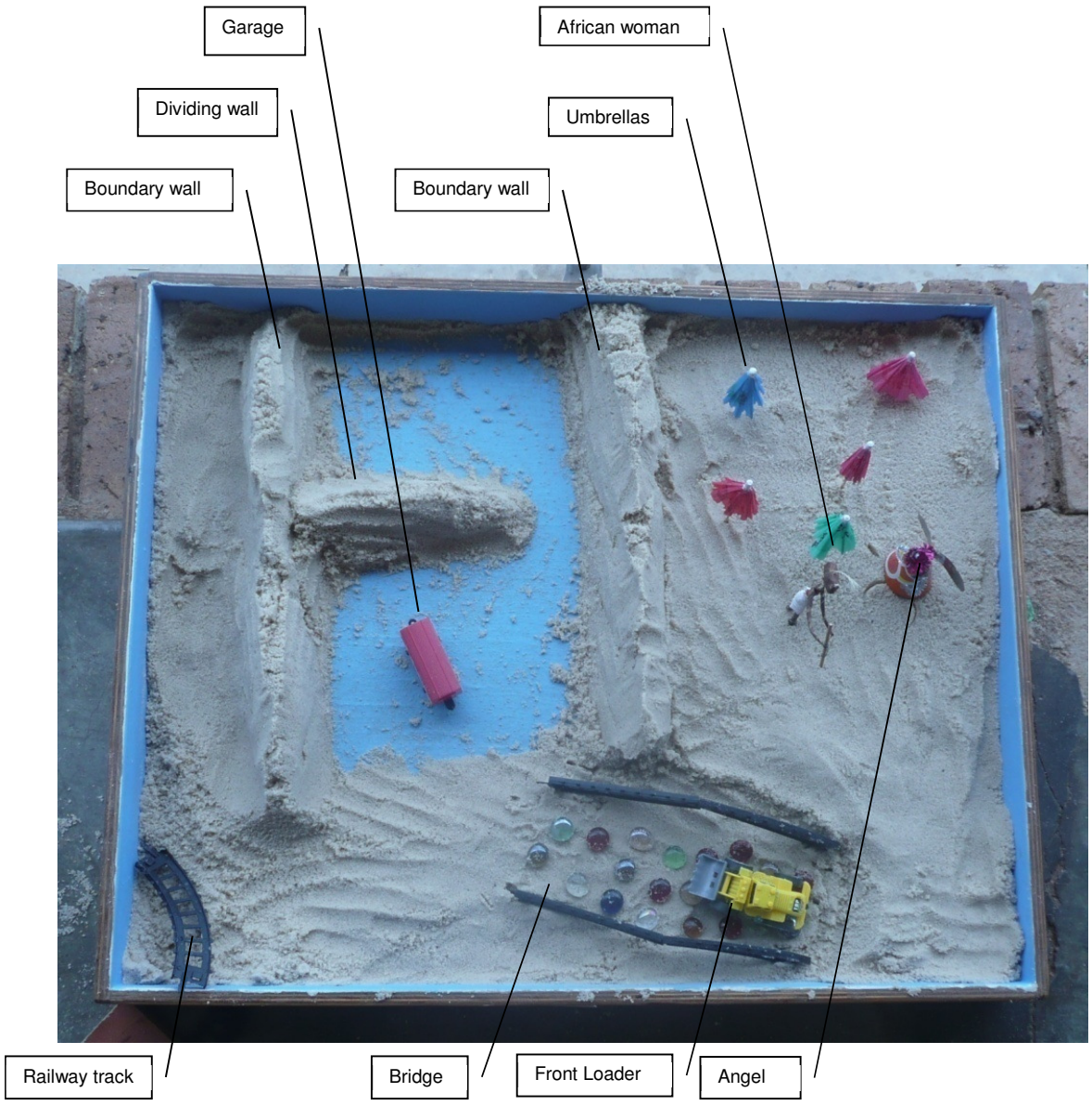

Figure 5.2: Noku's sand tray scene. Retrieved from the original assessment data

It appeared as though Noku was in a trance-like or dissociative state during the session, whereby she was compulsively working through phases of building, breaking down and rebuilding the sand. Part of this process also entailed making a thick dividing wall which is likely to symbolise male genitalia (penis) and could possibly be a re-

enactment of the suspected abuse (sexual victimisation) perpetrated by her brother or a male figure in her life. Noku's happy feeling response also appeared inappropriate and unfitting to the situation. Homeyer and Landreth (1998) found that sexually abused children often exhibit repetitive play behaviour that involves the same actions (e.g. building and then destroying), structures/objects, and themes (Gil as cited in Mathis, 2001; Harper 1991), and dissociative play behaviour by going into a trance-like state when playing with water and sand or while re-enacting the abuse. Trauma experts (Gerson & Rappaport, 2013; Gold, 2012; Van der Merwe, 2009) confirm that post-trauma victims of maltreatment such as sexual assault or sexual abuse can employ dissociation to cope with the intensity of emotions, distressing aspects or after-effects of the traumatic experience. Noku's repetitive play behaviour also mimicked the compulsive nature of trauma which often involves the need to repeat past trauma patterns through destructive, out-of-control behaviour or re-victimisation (Spooner & Lyddon, 2007, Van der Kolk, 1989).

5.2.2.2 Interaction with the sand

The following interpretations apply:

- Noku made contact with the sand instantaneously without displaying any resistance. The ability of sand, which is a natural play medium; to engage and make clients feel comfortable to express trauma is affirmed by Vinturella and James (1987).
- Throughout the building process, Noku seemed vigorously engaged with the sand and was only able to stop interacting with it once the assessor informed her that the activity had ended. Cockle's (1993) research is of relevance here in that children that struggle to cope in life are unable to complete a Sandplay task in the provided time and create a tray "in progress" because of the dynamic or changing scenes. For Cockle, these behaviours are the result of the emotional turmoil and distress experienced by these children that are often overwhelming and difficult to contain so they will use an entire session for the expression of their needs and the building process as a way of releasing the extra pent-up psychic energy generated by their pressing issues. Briere and Lanktree (2012) explain that trauma causes a person to feel constantly overwhelmed by painful emotions, such as fear, helplessness, shock and guilt, related to the trauma which is often worsened by a poorly developed ability to manage these types of negative emotions.

- Noku took time to flatten the sand, as is evident in the images of the handprints in the tray. Turner (2005) interprets this as a possible need to control emotions or an obsessive defence. Following trauma, survivors often try to avoid any recollection of the traumatic event and one way of doing this is by avoiding feelings connected to what had happened to them (Godbout & Briere, 2012). An image of Noku pressing unwanted emotions related to the alleged abuse back down into the sand comes to mind.

5.2.2.3 Position of the participant in relation to the tray

Noku worked from the short side of the sand tray whereas, in most instances, the long side of the tray is used. Turner (2005) explains that when a person works in the tray from this angle, the tray becomes an extension of that person which can then be altered and moved with sand and figures. A length-wise relationship to the tray frequently has to do with discomfort in the physical body and can indicate illness, wounding, or physical intrusion and trauma that the person has experienced. Based on the case history, sexual traumatisation of the body can in all probability be inferred here.

5.2.3 THE RESEARCHER'S FEELING RESPONSE TO THE SANDPLAY SCENE

In the process of making sense of a Sandplay scene, Kalff (as cited in Mitchell & Friedman, 1994; Turner, 2005) suggested becoming aware of what emotions, bodily sensations or images the scene as a whole or a particular element in it evokes within the therapist. For Kalff, focussing on how the tray makes one feel, what strikes one first about the tray and what impressions the scene gives can broaden ones understanding considerably. When I looked at the scene, I became aware of heaviness in my chest and I had some difficulty breathing. My attention was immediately drawn to the left side of the tray with the overbearing presence of the thick dividing wall, which for me looked like an erect penis and made me feel intimidated, vulnerable and scared. Kalff (Turner, 2005) also suggested linking such feelings to one's own life and history to consciousness. I sensed trauma that had been passed down generations of women that had suffered under male oppression and I felt a strong need to stand up for and protect all exploited women (Edwards & Blokland, 2011). The story that Noku told about her tray perhaps also had a strong feministic and social justice undertone of wanting to protect and stand up against male domination, not only for herself, but also for other women or vulnerable individuals in her community. The fact that African women and girls still find themselves in a scenario where the social and cultural

practices normalise violence and uphold discriminative behaviour against women contextualises Noku's story (Mahlangu et al., 2014).

5.2.4 THE SANDPLAY STORY

Noku's story contained rich information and brought objectivity to the analysis process as it was the creator's own perspective of what was happening in the scene (Turner, 2005). Upon completion of the sand scene, Noku was invited to tell her story about the world she had created in the tray. She said: "*Made a garage for parking the cars. The cars to be protected. In our area no more garages. I need to be the one to make garages for community*". Noku was then asked to place herself in the tray and she indicated that she was inside the garage (pointed to the passenger cart).

The following interpretations apply:

- The theme of Noku's story projects a need for protection and nurturance. Harper (1991) investigated different forms of maltreatment including physical, sexual or a combination of both types of abuse and discovered that the need for protection and nurturance was relayed in the narratives of all the abuse victims. Figley (2012) explains the traumagenic dynamics at play here in that trauma directly violates individuals' fundamental need to feel safe and protected in their environment. Bearing in mind that abuse usually occurs in close interpersonal relationships where there is an expectancy of trust, safety and care (Blaustein & Kinniburgh, 2015), violation of these basic needs can lead to negative expectations of oneself as being powerless, of others being undependable to fulfil one's needs, and of the world being a dangerous place (Vaccaro & Lavick, 2008).
- This 'protection' theme does not only have bearing on Noku, but, as she implied, also on the community that she lives in. Noku implied that her community was unsafe and that the people there required protection. It is possible that she might specifically have been referring to the women in her community. Garrib et al. (2011) corroborate that the eminent threat of violence and crime is a daily reality for those living in rural communities due to the presence of social disparities related to poverty and unemployment (structurally-induced trauma). Noku might also have been implicating the traditionalist African culture that upholds violence and discrimination against women (historical trauma). By referring to her 'area' or 'community', Noku most likely gave trauma a collective rather than an

individualistic meaning which impacts a specific geographical community i.e. the rural community (Edwards & Blokland, 2011; Pieterse et al., 2011).

- Noku's story did not correspond with the content of the scene she had built. This is in accordance with the research of Zinni (1997) who found that traumatised children found it more difficult to build meaningful, congruent scenes that corresponded to the story of their trays.
- Noku's story relayed signs of despair as she said that there were no garages in her community, but also personal power as she said that she had to be the one to build these garages. According to Van der Merwe (2009, p. 32), this display of personal power might be a 'retrospective intervention fantasy' often seen in clinical work during the post-trauma phase where action is taken by the victim to try to reverse the sense of powerlessness that was experienced during the traumatic incident. Cockle (1993) found that the narratives of children that were not coping in life had themes of despair, but, when there was a glimmer of hope or personal power, better outcomes for the resolution of their problems were predicted. Noku's story does not only depict her as a victim, but also as a resilient survivor in that she has a strong sense of social justice in wanting to serve and fight for her community.

5.2.5 CONTENT OF THE SAND TRAY SCENE

In order to understand the psychological communication in Noku's tray, the following aspects were taken into consideration (Mitchell & Friedman, 1994; Turner, 2005):

5.2.5.1 Symbolic content

Noku only identified one item in her Sandplay story: the passenger cart which, for her, symbolised a garage that provided protection for the cars in her neighbourhood as well as for her. Turner (2005) emphasises the importance of demonstrating how the symbolic content of the tray is relevant to the specific case under consideration. The following hypotheses about the items that were not identified by Noku are presented below:

- The symbolic meaning of an umbrella in the African culture is that it offers shading and protection (Nel, 2014). This relates back to Noku's need for protection, as expressed in her Sandplay narrative as well as her complex trauma history.

- An angel can symbolise a helper, perhaps indicating that Noku helped other people which corresponds with her Sandplay narrative (McNally, 2001). However, it could also mean that she required help herself if her trauma history is taken into account.
- A bridge's symbolic meaning is of something that still needs to be overcome (Herder as cited in Rottier, 2009), or that it can form a connection between opposing parts (Turner, 2005). Both meanings are relevant here, as Noku had probably still not dealt with her trauma or the abuse was still going on and needed to stop. Noku would also have to integrate parts within herself and what has happened to her in order to heal and form her own identity.
- A traditional African women figure walking with a cane could symbolise the way Noku viewed herself as helpless, frail and dependent on the care and protection of others. It might also be a symbol of the gender struggle of African women and their outcry for freedom from male oppression (Edwards & Blokland, 2011; Gevers et al., 2013).
- A front loader or bull dozer is used in the construction industry to pick up and move huge amounts of gravel, and could symbolise masculinity, strength and destruction or something that still needs to be moved out of the way. The fact that the front loader blocked the bridge in the tray could also afford it the meaning of obstructing traumatic content from reaching consciousness, integration and healing, or of keeping Noku in the dangerous situation and away from protection.

5.2.5.2 Use of figures

Noku's use of figures suggests the following:

- Noku used a limited number of figures and objects from a restricted range of miniature categories which were all lifeless things except for one woman figure to build her scene. Through research, Bowyer (as cited in Mitchell & Friedman, 1994), Bühler (as cited in Mitchell & Friedman, 1994), and Grubbs (2005) developed a classification of sand trays that indicate emotional problems and a need for therapeutic intervention. According to these researchers, Noku created an empty, lonely appearing world that is devoid of people. This could imply that she experienced the world as a lonely, empty and unhappy place, that she felt rejected and wanted to disappear, or that she was sad, had low energy levels and was depressed (Grubbs, 2005; Turner, 2005). Emotional pain and abuse,

feelings of hostility/aggression towards others for hurting her emotionally, physically or sexually, feeling threatened or isolated, and wanting to escape from people are further suggested by an 'unpeopled' world according to Grubbs (2005). Trauma experts (Briere & Lanktree, 2012; Gerrity & Folcarelli, 2008) confirm that victims of severe interpersonal trauma cannot find security in relationships and are often isolated, lonely, depressed and feel disconnected from their family and peers. Taking Noku's case history into account, her empty, unpeopled scene in all probability signified a deep sense of loss and betrayal caused by a violation of trust due to her feeling abandoned by her mother and exploited by trusted male figures in her life.

- Turner (2005, p. 171) links an absence of figures to early developmental deprivation for it indicates a "less-defined capacity to bring form to the inner and outer world" through symbolic objects. Developmental trauma research confirms that early deprivation due to abuse or neglect changes neurodevelopment that has lasting effects into adolescence and adulthood (Bremmer, 2011, Perry 2009). Noku's external circumstances suggest economic hardship and limited resources which could have interfered with her development (Eagle & Kaminer, 2015).
- Noku's sand world did not have any vegetation and she did not make use of scenery. According to Turner (2005), a lack of vegetation provides information about a client's experience of desolation. Cockle (1993) found that children who had difficulty coping with life's demands used minimal scenery in their trays which might be a portrayal of the view they have of their internal and external worlds as deficient in life and growth. According to Doyle and Perlman (2012), traumatised individuals are often stuck in negative trauma-related emotions such as hopelessness, sadness and low mood, and they struggle to find meaning in life and to be optimistic about their futures. This description is also in line with the profile that was drawn-up of Noku's inner life (Section 5.2.1.5) in which she feels worthless, inadequate and lost.

5.2.5.3 Arrangement of figures and shape of the sand

- Noku configured the sand into a shape that is most likely to represent an erect penis. For Turner (2005, p. 231) genital imagery can "appear in the healing process of clients who were sexually abused or devitalised in some way," and it has to do with the "development of contra-sexual elements of the personality" pertaining to the anima and animus. Homeyer and Landreth (1998) found that sexually abused girls displayed sexualised play behaviours by drawing long phallic shapes or males with penises.
- Noku placed herself, like a figure, in the garage (passenger cart) on the ominous left side of the tray and not on the right where protection was available. The garage, which was supposed to offer protection, looked small and insignificant in comparison to the looming dividing wall, and was lost in the huge open blue space. The created scene evokes the feeling of hopelessness and desolation as danger is eminent. By intentionally placing herself on the left side, Noku may have been telling the assessor that she needed help as she was being abused at the time of the assessment, and that she felt powerless or that she needed therapy to heal. A strong sense of powerlessness is a trademark of sexual abuse which Van der Merwe (2009) attributes to the violation of personal boundaries, personal control and the right to say no. Bowyer (as cited in Mitchell & Friedman, 1994) found that trays that deliberately communicate problems require therapeutic intervention, and Turner (2005) stresses that when figures are carefully placed within a scene it can show greater intent in the healing process of the client.
- The fragile African women figure walking with a cane is positioned with all the symbols of protection which might indicate the vulnerable position of African women within society (Edwards & Blokland, 2011; Gevers et al., 2013; Nel, 2014).

5.2.5.4 Colour

- The dominance of the colour red in the tray might indicate a longing for life (Turner, 2005).

5.2.5.5 Use of the blue bottom of the sand tray

- It appears as if the blue base was used to indicate a clean surface or an open area like a storage facility or parking lot (Turner, 2005).

5.2.5.6 Relationship between figures and elements of the scene

- Noku clearly built two opposing worlds/forces/themes in the tray, by grouping certain miniatures together on the left and others on the right, which were separated by a solid boundary wall so that it created the impression that the two sides were not supposed to interact with one another. The left side might have represented masculinity (animus) and had a tone of threat, intimidation and sexuality. The right side may have represented femininity (anima) and had a tone of frailty, protection and innocence. A feeling of good versus evil may also come to mind. The two groupings could possibly be related to the traumatic experience of abuse (e.g. sexual trauma) in Noku's external social world or to parts within herself and how these parts relate to each other (Turner, 2005).
- In observing the relationship of the parts and opposites depicted in the tray, it is likely that Noku attempted to unify the opposites through a bridge, but the wheel loader obstructed the way so that the two sides could not unite or integrate. This matches up with the finding of Grubbs (1995) that sexually abused children were unable to unite opposing symbols or dramatise a unifying theme as they spent most of their time creating boundaries or obstructions to protect themselves from getting hurt. By compartmentalising the sexual trauma, the person can carry on as if nothing happened (Van der Merwe, 2009). Wiese (2013) also offers the explanation that when trauma is ongoing, deliberate, and of a highly intrusive nature like rape, or when the attacker is a relative or a known person, it becomes much harder for the survivor to work through and integrate the experience(s) emotionally.
- Noku placed a part of a train rail in the lower left corner of the tray which appears out of place and random. For Turner (2005) this could indicate low energy or a lack of decision making ability. Feeling lethargic and experiencing impaired decision-making abilities are symptoms of trauma and can also indicate depression which frequently accompanies trauma (SAMHSA, 2014).

5.2.5.7 Dynamic or static quality

- Movement in a tray can refer to the portrayal of action, interaction of figures and purposeful direction (Turner, 2005). Movement in Noku's tray tended to be static and blocked by two strong boundary walls formed from sand and a wheel loader which created an obstacle on the bridge – no movement of energy or interaction between the two parts of the tray could occur. Research by Grubbs (1995)

indicated that movement in the trays of sexually abused victims tended to be stagnant or blocked.

5.2.5.8 Boundaries

- Noku's sand tray was characterised by compartmentalisation as the left side was bounded-off from the right side with a sturdy wall and entry was blocked by a wheel loader creating a closed system. Bowyer (as cited in Mitchell & Friedman, 1994) and Bühler (as cited in Mitchell & Friedman, 1994) recognised closed worlds by the fact that these worlds were partly or completely fenced in and usually had no gates or entryways or these entryways were blocked. For Bühler, such a world is a serious symptom of emotional problems and, according to Bowyer, demand therapeutic intervention. The research of Grubbs (1995) and Harper (1991) are applicable here as they found that children who have been traumatised through sexual abuse built more closed or fenced-in trays. Zinni (1997) ascribes this to the fact that abused children's personal boundaries are often invaded and they have no control over and feel powerless to change what happens to them. Making use of enclosures could indicate compartmentalisation, and a need to protect the inner self from others, to gain control, or to keep danger out and imprison an enemy (Webber & Mascari, 2008). It could also be an attempt to define oneself, or a symbol of fearing one's own impulses and trying to keep them at bay. Grubbs (1995) discovered that the internal and external boundaries created by sexually abused children were often ineffective or isolating in trays. In Noku's tray, she placed herself on the left side of the tray in the face of imminent danger, but the boundary walls and wheel loader isolated (boxed in) her from the protection that was available on the right side of the tray, leaving her vulnerable, alone and exposed.

5.2.5.9 Theme of the sand tray

The following themes were identified:

- The many symbols of protection including five umbrellas, an angel, a garage (passenger cart) and two boundary walls suggest a strong theme of a need for protection and safety. According to the research of Harper (1991) and Zinni (1997), a need for protection and nurturance was the dominant theme in the sand worlds of children traumatised by abuse. Homeyer and Landreth (1998)

also found that a need for protection was a common theme in the play of sexually abused girls. For Zinni (1997), this negative theme is most likely related to feelings of loss of control which accompany abuse.

- The dominating presence of the genital imagery on the left side of the tray also brings conceivable issues of sexuality or sexual trauma to the foreground. Harper (1991) confirms that the sand worlds of victims of sexual abuse revolve around a theme of sexuality. The research of Homeyer and Landreth (1998) offers further insight this matter as they found that the theme of play of sexually abused girls often revolved around sex. According to Van der Merwe (2009, p.34), traumatic sexualisation is the aftermath of sexual trauma: "When healthy sexual functioning is damaged due to the sexual nature of the trauma", it can result in confusion about sexual identity.

5.2.5.10 Closeness to consciousness

- Noku split her sand world into two opposing forces/scenes where the left scene was separated from the rest of the tray by two mounts of sand on each side. The research of Lagutina et al. (2013) on the symbolism of dissociation is applicable here as they established that split opposites or parts of a tray's being separated by a mount or a water divide indicate dissociation which they found was often linked to past trauma. Traumatology (Van der Kolk, 2005a, 2005b) recognises that a strong link between dissociation and adverse childhood experiences exists. Dissociation is employed as an avoidance coping strategy and results in a detachment from reality by altering consciousness.
- Noku's tray also resembled more imaginary places than it did real daily life which probably means that the content of the scene is still not close to consciousness (Turner, 2005).
- Some Sandplay therapists (Turner, 2005) divide the sand tray into two parts of which the left side is the unconscious and the right side the conscious. It is clear that the sexual content is still in the unconscious which might mean that Noku was still not ready to deal with what had happened to her and, as the bridge which is the connection between the unconscious and the conscious was still blocked at that time, she was not conscious of her trauma.
- From the above discussion, it is feasible to assume that Noku was still unable to talk about what had happened to her due to the severity of the experience when she was constructing the scene in the sand (Ben-Amitay et al., 2009). In

the assessment data, she spoke of something very bad that her brother had done to her, but she was unable to fully disclose what had happened. This was also the case when she agreed that the suspected abuse be reported to the school but could not talk about what had occurred. However, the sand and miniatures allowed Noku to communicate her trauma in a non-verbal way (Weinrib, 2004). The sand also gently accessed the unconscious, allowing Noku to communicate what was happening to her and what she needed in order to heal even though she could not verbally disclose it in her Sandplay story (Weinrib, 2004).

5.3 COMPARISON BETWEEN A SINGLE SAND TRAY SCENE AND A PROJECTIVE TEST

An analysis of the Draw-A-Person (DAP) test, which as a projective-expressive medium is commonly used by many clinicians to reveal children's hidden needs, feelings, motives and experiences (Flanagan, 2007; Merrell, 2010), is included here to facilitate a deeper understanding of the dynamics at play in Noku's Sandplay scene. The researcher is aware that interpretive hypotheses based on projective media should not be made in isolation but need to be made in conjunction with other test results and case history information (Kaplan & Saccuzzo, 2009).

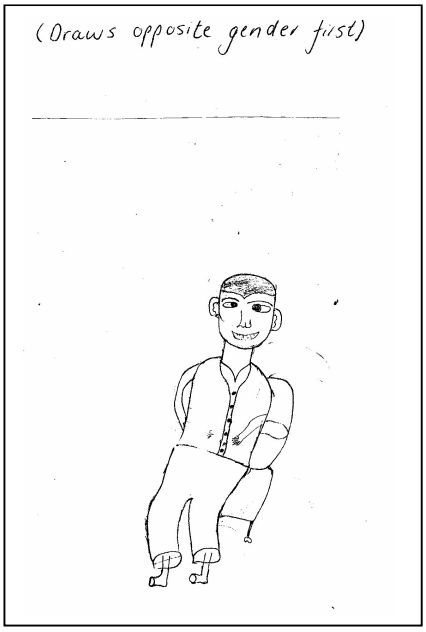

Figure 5.3: Noku's DAP. Retrieved from the original assessment data

Hagood (as cited in Falck, 2005) identified various indicators of sexual abuse in drawings where the following might apply to Noku's DAP (Fig. 5.3):

- Eyes with angular pupils
- Hands hidden
- Neck disproportionally long
- Teeth exaggerated

Homeyer and Landreth (1998) investigated the play therapy behaviours of sexually abused children and identified the following indicators of sexual abuse in art drawings that might be relevant here:

- A figure with displaced body parts
- A leaning figure
- Inclusion of long phallic shapes in the drawing which might apply to the long phallic shaped object protruding out of the side of the chair in Noku's drawing (Fig. 5.3)

The following features in Noku's drawing (Fig. 5.3) could in all probability be indicative of sexual trauma:

- Eyes looking down at her private parts
- Hands of which one was partially erased, growing out of the side of the body seemingly wanting to touch Noku inappropriately. These hands give the impression of an extra set of hands that do not belong to Noku.

By comparing Noku's sand tray scene with her DAP (Fig. 5.4), I found that the suggested themes of sexual trauma and sexual identity confusion became more apparent. Firstly, both projections had genital imagery in that a phallic-shaped object grew out of a boundary wall in the sand scene and out of the side of the chair in the DAP. Secondly, the sand scene was divided into two opposing scenes (one representing masculinity and the other femininity) where integration was blocked, and the DAP drawing, in which Noku drew the opposite gender first as the drawn figure looks like a man, could indicate sexual identity confusion (Van Niekerk, 1999). These interpretations need to be viewed against the case history and external situation which was discussed in Section 5.2.1 to be considered credible.

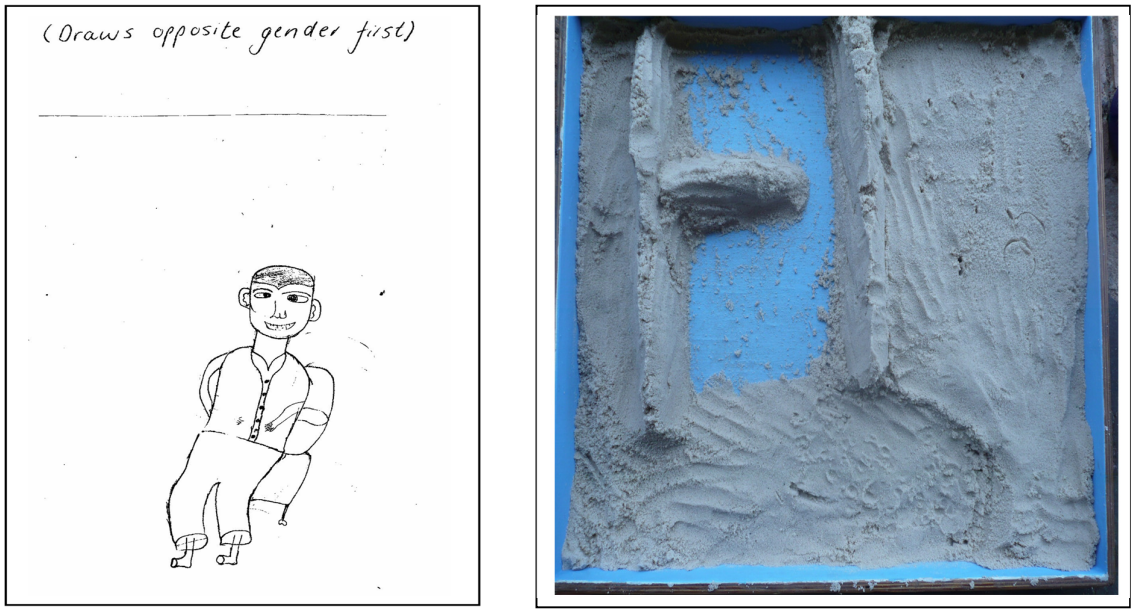

Figure 5.4: Comparison between Noku's DAP and sand tray scene

5.4 CONCLUSION

In this chapter, the data was analysed and interpreted in relation to the case history and external conditions of the participant and relevant literature. Findings were also compared with the results of the Draw-A-Person Test. In the process, various indicators of trauma as well as trauma-related suffering involving isolation, interpersonal difficulties, despair, fear, powerlessness, distrust, feeling unsafe, personal boundary issues, low mood, affect dysregulation, sexual identity confusion and dysfunctional coping behaviour involving dissociation and withdrawal were identified.

In the next chapter I summarise the main findings of the study in terms of the research questions formulated in Chapter 1, present the possible contributions and limitations of my study, and also make recommendations for further research, training and practice.

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CHAPTER 6
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In the previous chapter, I reported the results of my study and discussed my findings in terms of relevant literature.

In this chapter, I present the main findings of this study in terms of the research questions formulated in Chapter 1. Thereafter, I reflect on the possible contributions and limitations of my study, and I conclude with recommendations for further research, training and practice.

6.2 FINDINGS OF THE STUDY

In this section, I present an overview of the findings of my study by, firstly, addressing the secondary research questions, and, secondly, re-visiting the primary research question presented in Section 6.2.3.

6.2.1 SECONDARY RESEARCH QUESTION 1: WHAT INDICATIONS OF TRAUMA ARE REVEALED IN LITERATURE ON SANDPLAY?

This research question was exhaustively addressed in Section 3.8 of Chapter 3 and, due to the amount of information assembled, will only be discussed briefly here.

In my exploration of the indications of trauma relayed in Sandplay literature, I discovered that different researchers used different guiding principles to analyse, interpret and understand the content and meaning of sand trays. Added to this was the fact that diverse trauma populations were included in the research studies and that the variations in findings related to these groups were not always clearly indicated. For these reasons, a clear set of trauma indications that can be used to identify different types of trauma was impractical. However, in general, main indications of trauma in Sandplay literature can be deduced and are as follows:

- An aggressive sand tray scene that depicts various acts (themes) of violence, accidents, tragedy, and conflict (Bowyer as cited in Mitchell & Friedman, 1994;

Bühler as cited in Mitchell & Friedman, 1994; Cockle, 1993; Grubbs, 1994, 1995, 2005; Harper, 1991; Webber & Mascari, 2008; Zinni, 1997).

- An empty, lonely-appearing scene that is often devoid of life, scenery and vegetation (Bowyer as cited in Mitchell & Friedman, 1994; Bühler as cited in Mitchell & Friedman, 1994; Cockle, 1993; Cunningham et al., 2000; Grubbs, 1995, 2005; Turner, 2005; Webber & Mascari, 2008).
- A scene without human figures in it (Bowyer as cited in Mitchell & Friedman, 1994; Bühler as cited in Mitchell & Friedman, 1994; Cockle, 1993; Grubbs, 1995, 2005, Webber & Mascari, 2008).
- A closed-off scene which is completely or partly fenced-in and has no/obstructed gates and/or entryways (Bowyer as cited in Mitchell & Friedman, 1994; Bühler as cited in Mitchell & Friedman, 1994; Grubbs, 1995, 2005; Harper, 1991; Lowenfeld as cited in Carey, 1999; Webber & Mascari, 2008; Zinni, 1997).
- A rigid scene in which animals, people or objects are lined up in unrealistic rows (Bühler as cited in Mitchell & Friedman, 1994; Grubbs, 2005; Webber & Mascari, 2008).
- A chaotic, incoherent scene in which the selected items appear to have been randomly picked out and arranged in a disordered and unrelated manner (Bowyer as cited in Mitchell & Friedman, 1994; Bühler as cited in Mitchell & Friedman, 1994; Cockle, 1993; Cunningham et al., 2000; Grubbs, 2005; Harper, 1991; Lowenfeld as cited in Carey, 1999; Webber & Mascari, 2008; Zinni, 1997).
- A bizarre (satanic) or extremely primitive scene that contains primal elements of nature like reptiles, rats, mice and spiders, or evil elements such as skeletons and devils (Grubbs, 1994, 2005).
- A scene that is not age-appropriate (Bowyer as cited in Mitchell & Friedman, 1994; Cockle, 1993; Zinni, 1997).
- A scene of which the theme is sexuality (Harper, 1991; Homeyer & Landreth, 1998; Turner, 2005).
- A lack of conflict resolution (negative outcome) in the scene or its narrative which, often brings protection, safety and nurturance needs to the foreground (Cockle, 1993; Cunningham et al., 2000; Gil as cited in Mathis, 2001; Grubbs, 1995; Harper, 1991; Zinni, 1997).
- Burying, hiding or pushing figures, often symbolising the perpetrator of the trauma, down into the sand (Bowyer as cited in Mitchell & Friedman, 1994; Cockle, 1993; Cunningham et al., 2000; Grubbs, 1994, 2005; Homeyer & Landreth, 1998; Steinhardt, 1998).

- Repetitive play behaviour that involves repeating the same actions, structures, objects, and themes in a scene or a series of scenes (Gil as cited in Mathis, 2001; Harper, 1991; Homeyer & Landreth, 1998; Lowenfeld as cited in Carey, 1999).
- An absence of themes involving fantasy (Cockle, 1993; Harper, 1991), spirituality (Grubbs, 1995) and wish fulfilment (Harper, 1991) which often give scenes a realistic quality.
- An absence of themes that portray a dependency on other people for need-fulfilment and support like family and community scenes (Cockle, 1993; Harper, 1991; Grubbs, 1995; Zinni, 1997).
- Being in a trance-like or dissociative state while playing with water, sand and figurines or while re-enacting the abuse (Homeyer & Landreth, 1998; Lagutina et al., 2013, Zinni, 1997).
- The sand play activity is experienced as stressful (Cockle, 1993; Harper, 1991; Zinni, 1997).

6.2.2 SECONDARY RESEARCH QUESTION 2: WHAT IS THE UTILITY OF A SINGLE SAND TRAY SCENE AS A SCREENING TOOL FOR TRAUMA IN A RURAL SCHOOL YOUTH?

Based on the findings, I conclude that the utility of a single sand tray scene as a screening tool for trauma with a rural school youth is high and valuable. Firstly, the participant felt at ease, and she spontaneously engaged with the sand medium and miniatures without showing any resistance and did not require any assistance from the student-psychologist (Vinturella & James, 1987). This implies that clients who are fearful or resistant might feel more at ease with a screening technique that utilises sand (earth) and play which are well-known and natural ways of expression for children (Spooner & Lyddon, 2007; Steinhardt, 1998). Secondly, the participant did not have to use language to express painful feelings or to talk about traumatic experiences as she could do that nonverbally and symbolically through the sand medium and provided culturally-appropriate figurines and objects (Richards et al., 2012; Webber & Mascari, 2008). This means that poor verbal abilities either due to a language barrier or the severity of the trauma that hinders talking about it are taken out of the screening equation (Ben-Amitay et al., 2009; Richards et al., 2012; Webber & Mascari, 2008). Thirdly, the Sandplay technique gently accessed the unconscious of the participant, where severe trauma related to the alleged abuse was stored, and this allowed the trauma to be released and expressed in the scene (Weinrib, 2004). Clearly, the tactile

sensori-motor body experience of the Sandplay technique can bring up and release strong feelings and body memories of trauma more effectively than screening techniques that rely on words (Lagutina et al., 2013; McNally, 2001). Fourthly, the Sandplay experience created a sense of distance and safety by employing aspects like symbolisation and metaphor which promoted greater disclosure of the abuse that had probably occurred (Carey, 1999; Kosanke, 2013). Fifthly, the single sand tray scene, which corresponds with the first tray in Sandplay therapy which is recognised for its ability to pick up the presenting problem to be addressed in therapy, was able to identify possible signs of abuse that most likely required intervention. Finally, the sand tray scene reflected other types of trauma (e.g. living under constant threat posed by an unsafe neighbourhood) and trauma-related suffering (symptoms) which involved expressions of isolation, interpersonal difficulties, despair, fear, powerlessness, distrust, feeling unsafe, low mood and dysfunctional coping strategies involving dissociation and withdrawal. This attests to the sensitivity of the first/single sand tray scene as a screening tool for different types of trauma and trauma-related issues and symptoms. Evidently, the first/single sand scene can be effectively used as a cross-cultural screening and assessment tool for trauma.

6.2.3 PRIMARY RESEARCH QUESTION: HOW DO A RURAL SCHOOL YOUTH INDICATE TRAUMA IN A SINGLE SAND TRAY SCENE?

The following presentation (Table 6.1) of the conceivable ways in which a rural school youth indicates trauma in a single sand scene is based on the findings presented in Chapter 5 and the rural context known. The trauma-related symptoms can also be used as trauma indicators, but, by presenting them separately, I also provide a picture of the complex nature of trauma and its far-reaching impact.

Table 6.1: Indicators of trauma in Sandplay

Trauma and trauma-related symptoms	Indicators of trauma in Sandplay
Maltreatment: • Sexual assault • Rape • Sexual abuse	• Works from the side of the sand tray instead of the long side of the tray which means standing in a length-wise relationship to the tray. • The Sandplay story does not correspond with the content of the sand tray. • Shapes the sand into a body part resembling the male genital (penis).

	• Obstructs the unification or integration of opposites which can pertain to symbols, theme and scenarios depicted in the scene. • Creates protective boundaries. • Creates ineffective or isolating boundaries. • Obstructs movement in the tray – the flow of energy or interaction between parts or figurines in the scene. • The theme of the scene revolves around sexuality by for example having genital imagery in the tray. • Intentionally places self or figurines in a hostile, dangerous part of the scene that simulates the impending abuse of the vulnerable victim.
Dissociation:	• Enters a trance-like state that involves repetitive play behaviour such as for example compulsively building, breaking down and rebuilding sand structures. • Enters a trance-like state while re-enacting the traumatic experience that could for example involve shaping the sand into a body part symbolising an erect male penis of the abuser or the violating act. • Separates parts of the scene by a mound or split opposites such as positive and negative scenes/themes/symbols opposing each other (symbolism of dissociation)
Emotional dysregulation: • Unable to deal with painful emotions • Feeling emotionally overwhelmed	• Unable to complete a Sandplay task in the provided time and cannot stop building. • Creates a dynamic tray that is “in progress” because of changing scenes.
Avoidance of feelings connected to trauma:	• Flattens sand with hands.
Constructs boundaries to ensure feeling safe, protected and nurtured in own environment: • Distorted beliefs related to distrusting oneself, people and the world • Loss of control • Powerlessness • Fear	• Builds a compartmentalised world with fenced-in or restricted areas and obstruct entryway. • Creates internal and external boundaries that are ineffective or isolating as they prevent interaction between figurines in a scene or access to valuable resources available in a scene. • Intentionally positions vulnerable symbol such as a fragile African women figurine walking with a cane with symbols of protection including umbrellas and angels. • Uses many symbols of protection including five umbrellas, an angel, a garage (passenger cart) and two boundary walls. • A need for protection and nurturance is relayed in the meaning of the Sandplay story and the theme of the Sandplay scene.
Powerlessness and lack of control:	• Intentionally places self or figurines in a hostile; dangerous part of the scene that simulates the impending abuse of the vulnerable victim and from which there is no escape as the exit is blocked. • A lack of conflict resolution is evident in the theme of the scene. Situations that do not get resolved, from which there is no escape and of which the outcome remains negative relay the feeling of powerlessness to control and change the situation.

	• A lack of conflict resolution is evident in the narrative told about the scene. Stories with meanings of despair, injustice, and disempowerment, pessimism about the future, hopelessness and stories without endings relay the feeling of powerlessness to control and change the situation. • Tries to reverse a sense of powerlessness by displaying personal power in the Sandplay story that has a theme of danger and despair ('retrospective intervention fantasy'). • The theme of the sand scene and the meaning of the Sandplay story implies threat and fear.
Confusion about sexual identity:	• Shapes sand into a body part resembling male genitalia (penis). • Depicts contra-sexual elements of the personality pertaining to the anima (feminine) and animus (masculine) in the scene. • Depicts male and female as opposing forces of which their integration is blocked.
Feeling threatened and frightened:	• The theme of the sand scene and the meaning of the Sandplay story implies threat and fear.
Low mood and energy and impaired decision making ability: • Signs of depression	• Places part of a train rail in the lower left corner of a tray which appears out of place and random.
Internal and external world seen as deficient of life and growth: • Loss of meaning • Pessimistic about future • Despair	• Omits vegetation and scenery (barren world).
Interpersonal disturbance: • Isolation • Deep-seated distrust of people for the fulfilment of needs and offering support • Feeling abandoned	• Builds an empty, lonely-appearing, lifeless sand world. • Uses a limited number of miniatures (less than 30) from a restricted range of miniature categories to build the scene. • Builds an unpeopled world filled with lifeless things. • Omits vegetation and scenery. • Community or domestic scenes/themes are absent
Early developmental deprivation: • Neglect • Extreme economic hardship and limited resources	• An absence of miniatures in a scene.
Chronic trauma due to living in crime-ridden neighbourhood: • Structural violence • Extreme economic hardship and limited resources	• Expresses a need to feel safe and protected in own community through the Sandplay story. • Indicates in Sandplay story that there are no protective resources available in community, only risks.

Intergenerational trauma: • Structural violence • Traditionalist African culture that oppresses women	• Expresses a need to feel safe and protected in own community through the Sandplay story. • Intentionally positions fragile African women figurine walking with a cane with all the symbols of protection on the safe side of the scene. • Expresses a need to help to protect other people in the unsafe community.

6.3 CONTRIBUTION OF THE STUDY

The study holds the value of contributing to the existing knowledge and literature on Sandplay that focus on establishing more controlled and descriptive ways of analysing and understanding sand scenes. In this way, the first/single sand tray scene with its interpretive guidelines can gain value as an assessment, screening or diagnostic measure. Its practical applicability can be further supported as it can be applied to a rural client base.

This research could add to the existing research base on cross-cultural assessment practices and the indigenisation of assessment measures to be sensitive to the cultural variations and biases in the realms of language, affect and cognition of clients living in low resourced areas of South Africa. The current drive for the re-legitimisation of projective techniques and their application with clients from diverse backgrounds can also be supported through this research.

The findings from this research could be valuable to Educational Psychologists that work with adolescent-clients in rural school or community settings. The study could offer an alternative screening method with trauma indicators for the interpretation of trays to detect trauma so that clients can receive appropriate treatment. The single sand tray scene technique can also be applied in a group context so that more clients have access to psychological services. This could form an invaluable part of an assessment battery. This study could also increase awareness amongst practitioners of the value of using play therapy based techniques for screening and assessment purposes.

Due to the complex nature of trauma, there is an urgent need to broaden our understanding of it and its victims. This study could contribute to this endeavour of the Traumatology field.

6.4 LIMITATIONS OF THE STUDY

The following limitations pertaining to the study are noted:

- A single case was explored which limits the generalisability of the findings of the study. That being said, the purpose of this study was not to generalise its findings, but rather to explore the complex phenomenon of trauma in-depth. By providing a comprehensive description of the nature of the rural context of the participant and by clearly stating the selection criteria, the findings could be applied to similar contexts and clients which address the problem of generalisation.
- In light of the sensitive nature of the assessment data and the findings of the study, the researcher felt it would be unethical to verify the findings with the participant for fear of doing harm by re-traumatising the participant. Subsequently, the research findings were verified by comparing it with relevant literature and asking for a Sandplay therapist's opinion of the Sandplay scene.

6.5 RECOMMENDATIONS FOR FUTURE RESEARCH, TRAINING AND PRACTICE

The following recommendations for future research, training and practice are made.

- Similar types of studies must be undertaken in low resourced or rural communities, possibly on a larger scale. This would further establish the cross-cultural applicability of a single sand tray scene as a screening tool for trauma and interpretive guidelines for identifying trauma in a scene.
- Helping professionals must be trained in cross-cultural assessment practices and alternative assessment techniques. From the findings of the research, it is clear that a single sand tray scene can be an invaluable screening tool for trauma and provide information about clients' internal and external circumstances. However, this requires knowledge about trauma, psychological theory, Sandplay theory and research as well as African symbolism and traditions. Sandplay might be underestimated and seen as a simple technique involving playing in the sand with objects, but it is actually an intricate tool that reflects the complexity of human beings that have experienced trauma.
- Helping professionals and, in particular, educational psychologists must utilise intervention techniques that offer more clients access to psychological services.

Educational psychologists must extend their services to rural communities as this is their social responsibility.

6.6 CONCLUSION

In this chapter, the main findings in terms of the primary and secondary research questions were answered, the contributions and limitations of the study were highlighted, and recommendations for future research, training and practice were made. For the researcher, trauma remains a complex, painful human experience which has common symptoms that are universal, but also unique features that depend on the client's context or frame of reference. Many of these experiences and emotions can be understood through simple expressions in the sand.

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