

The art of healing:

Traumatic stress and creative therapy in South Africa

© 2017, N. van Westrhenen

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from the author.

Cover: Debbie Hesseling, Amsterdam

Graphic Design: Proefschriftmaken, Debbie Hesseling

Printing/ binding: Proefschriftmaken

ISBN/EAN 9789462956919

The art of healing:

Traumatic stress and creative therapy in South Africa

De kunst van genezing: Traumatische stress en creatieve therapie in Zuid-Afrika

(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van de graad van doctor aan de Universiteit Utrecht op gezag van de rector magnificus, prof. dr. G.J. van der Zwaan, ingevolge het besluit van het college voor promoties in het openbaar te verdedigen op vrijdag 15 september 2017 des middags te 2.30 uur

door

Nadine van Westrhenen

geboren op 21 september 1987

te Naarden

Promotoren: Prof. dr. R. J. Kleber
Prof. dr. P. A. Boelen

Copromotor: Dr. E. Fritz

Contents

Chapter 1	Introduction	7
Chapter 2	Creative arts therapy as treatment for child trauma: An overview	23
Chapter 3	Reflections of social workers on working with abused children in South Africa	45
Chapter 4	The experiences of professional hospice workers attending creative arts workshops in Gauteng	63
Chapter 5	Experiencing adversity in South Africa: Relationship between PTSD symptoms, posttraumatic growth and resilience among students	81
Chapter 6	Creative arts in psychotherapy treatment protocol for children after trauma	103
Chapter 7	Suitability of a community-based creative arts therapy intervention for abused children in South Africa	125
Chapter 8	Creative arts therapy for traumatized children in South Africa: an evaluation study	141
Chapter 9	Discussion	159
Chapter 10	Summary	179
	Samenvatting (Summary in Dutch)	185
	Acknowledgements	191
	About the author	197



1

Introduction

Bonolo is a 9-year old black South African girl, residing in Soweto, Johannesburg, with her grandmother. Her mother passed away when Bonolo was four years old and she remained in the custody of her father. Two years ago, Bonolo was still living with her father, she was raped at home by a relative of her father who lives in the same complex. After the sexual abuse incident, the father moved Bonolo to stay with her grandmother. Bonolo reported feeling scared.

After conclusion of the forensic assessment, she was referred to the creative arts in psychotherapy (CAP) treatment at the local trauma clinic. This was a newly introduced treatment protocol, offering children like Bonolo who experienced abuse a supportive treatment. Over a period of ten weekly 90-minute group sessions, the CAP treatment focused on aspects such as psychosocial stabilisation, alleviating posttraumatic stress symptoms, promoting safety and developing coping skills through activities in different artistic disciplines.

Bonolo initially appeared shy but during the course of the sessions she started feeling more at ease, shown by an increased participation in activities and interaction with her peers. She encouraged participation of other children in the group, helped them share their stories, and taught the group her dance movements. She smiled and laughed a lot, cheering up other children. The social aspect of the group setting energized Bonolo and provided a platform for her to show her strengths and build her confidence.

On a number of occasions, Bonolo spontaneously spoke about her fears and sadness about what happened to her, sharing difficult feelings and personal information with the group. 'I feel sad, because the more I think of what happened, the more sad I feel. And scared, because when I share my story I feel scared about it.' Bonolo responded enthusiastically to physical interventions such as dancing and music activities. At the end of nine therapy sessions, Bonolo reported 'Now I am not scared anymore. Now I am sleeping nice. I know that other people help me.'

Bonolo is one of many children who have been exposed to abuse at a very young age. In combination with daily stressors associated with losing her mother, extreme poverty, and high levels of community violence Bonolo, like many other children in South Africa, is brutally denied her right to an adequate standard of living, leisure and play, and the right to be protected from any form of maltreatment and exploitation (UN convention on the rights of the child (UNCRC), Hodgkin & Newell, 2008). Child abuse is

a ubiquitous problem, and knowledge on how to successfully address the problem is still scarce, even more so in low and middle income countries.

South Africa has been referred to as being a natural laboratory to study trauma (Kaminer & Eagle, 2010), due to the prevalence rates being one of the highest in the world (Seedat, van Niekerk, Jewkes, Suffla, & Ratele, 2009). The dissertation will describe the psychological impact of traumatic events for children and young adolescents in South Africa, analyse barriers in child abuse care through the experiences of social workers, and evaluate the effectiveness of an innovative creative arts in psychotherapy intervention that was developed and implemented in order to help children like Bonolo recover after experiencing trauma. This introduction will provide an overview of the topic leading up to an outline of the different studies conducted as part of this dissertation.

Trauma exposure in South Africa

A traumatic stressor is defined in the DSM-5 as 'death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence' (APA, 2013; p.271). Studies in Western countries have estimated that around 60 to 70% of the children are exposed to at least one such traumatic stressor (Copeland, Keeler, Angold, & Costello, 2007; Finkelhor, Turner, Omrod, & Hamby, 2009), with 37% of children experiencing more than one traumatic event (Copeland et al., 2007).

South Africa, a place not at war, has extreme high levels of interpersonal violence; 4.5 times the global average (Seedat et al., 2009). Single traumatic exposure rates are estimated between 80% (Seedat, Van Nood, Vythilingum, Stein, & Kaminer, 2000; Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004) and 98.8% (Kaminer, du Plessis, Hardy, & Benjamin, 2013). Around 44% of the children have experienced more than one traumatic event (Seedat et al., 2004), and most of these children have been exposed to severe circumstances of continuous violence and chronic stress, including witnessing violence in the street, being robbed or mugged, and witnessing a family member being injured, beaten, hurt or killed (Seedat et al., 2000).

More specifically, in South Africa child abuse rates are one of the highest in the world. In the case of sexual abuse and exploitation, reported rates reach between 16.7% and 56% in boys and between 33.9% and 53% in girls (Carey, Walker, Rossouw, Seedat, & Stein, 2007; Jewkes, Dunkle, Nduna, Jama, & Puren, 2010; Madu & Peltzer, 2000; Optimus Study, 2016). Prevalence rates between 15.2% and 20.8% are reported for physical abuse, 16.1% to 26.9% for emotional abuse (Madu, 2003; Optimus Study, 2016), and

12.2% to 15.1% for neglect (Optimus Study, 2016). These figures differ widely, depending on the definitions of child abuse, the research methods, and the location of the study (Optimus Study, 2016).

It is hypothesized that factors such as poverty, inequality, large numbers of orphaned children, the rapid social-economic change, the breakdown of traditional values and practises, and poorly developed child protection services account for the high number of death, injury and violence (Lachman et al., 2002; Optimus Study, 2016). Also, the HIV and AIDS epidemic is one of the leading causes of death and disability-adjusted life years (DALYs) lost in South Africa, and forms a great source of stress and sorrow (Seedat et al., 2009).

Negative consequences of abuse and violence

A significant number of children exposed to a traumatic stressor develop post-traumatic stress disorder (PTSD), including intrusions, manifestations of avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity (APA, 2013). Multiple exposure to traumatic stressors increases the risk of more severe outcomes (Copeland et al., 2007; Finkelhor et al., 2009). In South Africa, high levels of PTSD have been reported amongst poor urban children; estimations have been published of 22.2% and 23.6% (Seedat et al., 2004; Suliman et al., 2009). Reported HIV and AIDS related PTSD rates are higher but vary across studies with a wide range reported between 5% (Myer et al., 2008) and 54% (Martin & Kagee, 2011).

Apart from PTSD, common trauma-related sequelae include depression, anxiety, and externalizing behaviour problems (Fincham, Altes, Stein, & Seedat, 2009; Jewkes et al., 2010; Suliman et al., 2009). Moreover, sexual abuse increases the risk of HIV and other sexually transmitted diseases (Jewkes et al., 2010). Exposure to maltreatment in childhood can also have severe consequences for later abuse. For instance, girls exposed to sexual abuse are at increased risk of encountering physical and/or sexual violence and sexual assault again in adulthood (Dunkle et al., 2004). Boys who have been abused in childhood are at increased risk of later becoming perpetrators (Jewkes, 2006). These findings stress the importance and urgency of sufficient interventions for children after abuse, to stop the intergenerational cycle of violence (Seedat et al., 2009).

Positive transformation after abuse and violence

For decades, the primary research focus of traumatic stress studies has been on psychopathological consequences rather than positive transformation. Recently,

a growing body of empirical evidence shows positive factors that facilitate mental health despite exposure to an adverse life event, such as resilience and posttraumatic growth (PTG). Resilience has both been referred to as a trait, or a personal quality that allows people to thrive in the face of adversity (Wagnild, 2009), as well as a state, or a consequence of surviving a traumatic event without developing psychopathology (Haglund, Nestadt, Cooper, Southwick, & Charney, 2007). Resilience has also been described as an ecological construct (Ungar & Liebenberg, 2011), referring to both common and unique aspects of resilience across cultures and settings. Considering the unique multicultural context of South Africa, we use the ecological resilience definition of Ungar (2008): “the capacity of individuals to navigate to health sustaining resources, including opportunities to experience feelings of wellbeing, and a condition of the individual’s family, community, and culture to provide these health resources and experience in culturally meaningful ways” (p. 225).

Posttraumatic growth (PTG) goes beyond bouncing back to a state before the event (i.e. resilience), and involves transformation that exceeds pre-trauma levels (Tedeschi & Calhoun, 2004). PTG includes a greater appreciation and new possibilities for one’s life, more meaningful interpersonal relationships, increased sense of personal strength, and spiritual development (Tedeschi & Calhoun, 2004). PTG has mostly been studied in adults and there is a growing body of literature describing the phenomenon of PTG in children and adolescents (Alisic, van der Schoot, Van Ginkel, & Kleber, 2008; Clay, Knibbs, & Joseph, 2009; Cryder, Kilmer, Tedeschi, & Calhoun, 2006; Kilmer et al., 2009). It has been suggested that those who are resilient also are more likely to experience PTG (Calhoun & Tedeschi, 2006). PTSD has also been positively associated with PTG (Alisic et al, 2008; Hall et al., 2010), but at the same time also negative relationships (e.g. Frazier, Conlon, & Glaser, 2001) or no relationship (e.g. Sleijpen, Haagen, Mooren, & Kleber, 2016) among PTSD and PTG, and among resilience and PTG (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009) have been reported. Overall, current existing studies exploring the relationships among these constructs are inconclusive (e.g. Engelhard et al., 2015). Moreover, they are mostly based on research in Western industrialized countries, causing a gap in knowledge concerning cross-cultural validity (Shakespeare-Finch & Copping, 2006; Splevins, Cohen, Bowley, & Joseph, 2010).

Treatment of trauma-related disorders

Evidence of treatment effectiveness for child and adolescent PTSD is available internationally, particularly for cognitive behaviour therapies (CBT) (Gillies, Taylor, Gray, O’Brien, & D’Abrew, 2013; Silverman et al., 2008; Wethington et al., 2008), but more evidence is required for the effectiveness of different therapies in the longer term. For

other types of therapy for children and adolescents, such as play therapy, EMDR, art therapy, and psychodynamic therapy, evidence is mostly lacking (Gillies et al., 2013). Moreover, most studies have been conducted in high-income countries. Findings of these studies are not automatically applicable in a context with different cultural beliefs about for instance causes and treatment of illness, and therapy interventions and not always implementable in a low or middle income country due to lack of resources and expertise (Tol et al., 2011).

Current resources in South Africa are insufficient to take care of the extreme high number of victims of child maltreatment. Moreover, most psychological treatments are currently based on Western health care models that are not only expensive and thus inaccessible for disadvantaged communities, but also foreign and disconnected to indigenous cultures and traditions. As Tol and colleagues (2011) pointed out in a review study, there is a serious gap between research and practise when it comes to interventions in low and middle income countries, with the most commonly used interventions (e.g. counselling and community-based support programmes) having the least rigorous research and evidence. In order to address this gap, there is a need to design, implement and evaluate an intervention programme for seriously maltreated children in South Africa.

Creative arts therapy

Creative arts therapy is an umbrella term covering the creative modalities of visual art, dance, drama, creative writing and music in a therapeutic context. This form of therapy integrates art practices and applications with principles of psychotherapy and counselling (Malchiodi, 2015). Creative activity in itself does not necessarily lead to positive resolution, but the goal of creative arts therapy is to facilitate expression that helps explore feelings and experiences without reinforcing traumatic memories (Malchiodi, 2015). Creative arts therapy was inspired by the idea of Jung in 1916 called active imagination. His idea was to use artistic expression through dance, music, painting, drama and other mediums to gain access to the unconscious; accessing the unconscious personal struggles could provide the possibility to consciously engage in resolving pressing issues (Jung, 1997).

The positive impact of creative art therapy can be understood from different theoretical perspectives. From a psychobiological perspective, conceptualizations of traumatic stress as a physiological response of the autonomic nervous system (Levine, 2010) support a somatic approach to intervention including sensory and bodily expression and integration (Harris, 2009; Ho, 2015; Koch, Kunz, Lykou, & Cruz, 2014; Levine, 2010).

Levine describes the somatic stress in the body that needs to be expressed in order to be relieved (Levine, 2010). Although evidence is limited, some neuroscience studies have described that traumatic memories are fragmented and encoded as visual images and somatic sensations without translation into narratives (Glaser, 2000; Harris, 2009; Klorer, 2005; Lanius et al., 2004), supporting non-verbal strategies.

From a cognitive-behavioural perspective, traumatic stress is considered to be caused by continuous negative thoughts and judgements (i.e. cognitive distortions) about the traumatic event, impacting on emotions and behaviour in such a way that it feels as if the individual is repeatedly re-living the trauma (Ehlers & Clark, 2000). In creative therapy, these cognitive representations can be identified by for instance making images of negative behaviour or anxiety-producing thoughts (Rozum & Malchiodi, 2003). Creative therapy can also help generate narratives that can be ordered or altered through cognitive reframing techniques (Steele & Raider, 2001), to help reduce long-term sequelae of posttraumatic stress.

From a social-cultural perspective (Vygotsky, 1986), the individual development is described as being constructed through interaction with adults and peers, and cultural beliefs and attitudes. Incorporating existing supportive cultural practises such as dancing, storytelling, visual depiction, and music specifically in a group setting can enhance individual development (Betancourt et al., 2010; Cluver, Fincham, & Seedat, 2009; Killian & Brakarsh, 2004; Yalom & Leszcz, 2008). Moreover, in a country like South Africa with eleven official languages it appears rather necessary to have an approach that does not rely too heavily on language. Creative arts therapy avoids the problem of children having difficulties verbalizing and rationalizing experiences and emotions (Harris, 2009). Children enjoy play and they feel more comfortable expressing emotions in a less direct manner. Creative arts therapy allows for a safe and symbolic exposure to stimuli that are perceived as threatening (Cassidy, Turnbull, & Gumley, 2014; Malchiodi, 2015). Moreover, the process of art making is perceived as a relaxing and soothing experience, and therefore can reduce arousal states, anxiety and depression (Jiang, Rickson, & Jiang, 2016; Malchiodi, 2015; Pretorius & Pfeifer, 2010).

Even though creative arts therapy has been used for a long time, actual evidence of its effectiveness is grossly limited compared to other trauma interventions (Eaton, Kimberly, & Widrick, 2007; Orr, 2007). Creative arts therapy is often considered unstructured, due to the client-centred approach, which complicates rigid scientific evaluation (Eaton, Kimberly, & Widrick, 2007). Moreover, creative therapists often lack research training that results in the scientific publication of results and as such add to the body of knowledge on the effectiveness of creative therapies. Therefore, there is a

great need for more collaboration between researchers and creative arts therapists to explore the effectiveness of arts-based methods (Camic, 2008).

Study aim and research questions

The overall aim of the studies in this dissertation has been to contribute to an improvement in mental health care offered to children after trauma in a context characterized by high levels of abuse, violence, crime and poverty. In order to achieve this aim, a creative arts therapy intervention programme for traumatized children was developed and evaluated in South Africa, and information was gathered that would inform about the development and outcome of this therapy programme.

In order to achieve this aim, this study was conducted in three different phases. The first phase aimed to gain understanding of the consequences and current treatment practises of child trauma in South Africa, by gathering information from multiple perspectives that could provide an indication of current barriers and practises in trauma care, and general psychopathology (i.e. PTSD) as well as positive transformation (i.e. resilience and PTG) after traumatic experiences. This information was obtained from social workers working with traumatized children as well as self-reports from university students who experienced traumatic events. The second phase aimed to develop and pilot-test the creative arts therapy intervention for traumatized children. In the third phase the creative arts therapy intervention was implemented and evaluated on a larger scale. Three main research questions were formulated guiding the dissertation:

1. What are the psychological consequences of students experiencing adversity in South Africa in terms of posttraumatic stress, PTG and resilience?
2. What are some of the key challenges health care professionals are facing in their work with abused children in South Africa?
3. What is the potential effect of a creative arts therapy intervention for traumatized children on posttraumatic stress, posttraumatic growth, and behaviour problems?

Dissertation outline

The idea of this dissertation was born after participation in a project on the evaluation of a creative arts therapy training for social workers working in hospices in Carletonville, South Africa that was conducted in 2010 in collaboration with the University of Johannesburg. In Carletonville, a small mining town two hours from Johannesburg, the Carletonville Home and Community Based Care invited an NGO called Dedel'ingoma to provide creative arts therapy workshops to their social workers, in order to transfer skills and facilitate self-healing by experiencing and teaching a diverse range of cre-

ative arts like music, drama, art, touch therapy, storytelling and movement (Chapter 4). The experience that I had witnessing the positive effect of using creative therapy in the South African context to treat stress-related disorders inspired me to develop a creative arts therapy programme for traumatized children. This project was realized in collaboration with researchers and clinicians from the University of Johannesburg, Utrecht University and the Teddy Bear Clinic for Abused Children. The Teddy Bear Clinic is a specialised clinic for children who have been abused or neglected, offering holistic services including medical and forensic assessments, therapeutic counselling, and court preparation and support. The clinic has several branches in different neighbourhoods and townships in and around in Johannesburg.

In phase 1 at the start of the project, evidence-based knowledge available on this topic was explored by conducting a systematic review study on creative arts therapy as treatment for child trauma related disorders (Chapter 2). After this, the experiences and consequences of traumatic stress in the South African society were explored, by interviewing social workers working in a clinic with traumatized children (Chapter 3), as well as conducting a survey with university students on traumatic experiences, posttraumatic stress, posttraumatic growth and resilience (Chapter 5). Based on this information, and practical experience volunteering at the Teddy Bear Clinic for Abused children for a number of years, in phase 2 of the project a protocol for the creative arts in psychotherapy (CAP) intervention was developed, which is described in Chapter 6. After development of the protocol, funds were raised through crowdfunding, local social workers were trained and the intervention was piloted. This pilot study resulted in significant insights regarding feasibility and challenges, described in Chapter 7. In phase 3, monitoring and evaluation allowed for continuous improvement and development of the programme, and eventually the evaluation results of three years running the programme are presented in Chapter 8, describing the effect of the CAP intervention for traumatized children on posttraumatic stress, posttraumatic growth, and behaviour problems. All findings and experiences are integrated in the discussion in Chapter 9, concluding this dissertation.

References

- Alisic, E., van der Schoot, T. A. W., van Ginkel, J. R. van, & Kleber, R. J. (2008). Looking beyond PTSD in children: Posttraumatic stress reactions, posttraumatic growth, and quality of life in a general population sample. *Journal of Clinical Psychiatry*, *69*(9), 1455-1462. doi:10.4088/jcp.v69n0913
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Betancourt, T. S., Borisova, I. I., Williams, T. P., Brennan, R. T., Whitfield, T. H., De La Soudiere, M., ... Gilman, S. E. (2010). Sierra Leone's Former Child Soldiers: A Follow-Up Study of Psychosocial Adjustment and Community Reintegration. *Child Development*, *81*(4), 1077-1095. doi:10.1111/j.1467-8624.2010.01455.x
- Camic, P. M. (2008). Playing in the mud: Health psychology, the arts and creative approaches to health care. *Journal of Health Psychology*, *13*(2), 287-298. doi:10.1177/1359105307086698
- Calhoun, L. G., & Tedeschi, R. G. (Eds.). (2006). *The handbook of posttraumatic growth: Research and practice*. London, UK: Lawrence Erlbaum.
- Carey, P., Walker, J. L., Rossouw, W., Seedat, S., & Stein, D. (2007). Risk indicators and psychopathology in traumatised children and adolescents with a history of child sexual abuse. *European Child and Adolescent Psychiatry*, *17*(2), 93-98.
- Cassidy, S., Turnbull, S., & Gumley, A. (2014). Exploring core processes facilitating therapeutic change in Dramatherapy: A grounded theory analysis of published case studies. *The Arts in Psychotherapy*, *41*(4), 353-365. doi:10.1016/j.aip.2014.07.003
- Clay, R., Knibbs, J., & Joseph, S. (2009). Measurement of posttraumatic growth in young people: A review. *Clinical Child Psychology and Psychiatry*, *14*(3), 411-422. doi:10.1177/1359104509104049
- Cluver, L., Fincham, D. S. & Seedat, S. (2009). Posttraumatic stress in AIDS orphaned children exposed to high levels of trauma: The protective role of perceived social support. *Journal of Traumatic Stress*, *22*(2), 106-112. doi:10.1002/jts.20396
- Copeland, W. E, Keeler, G., Angold, A., & Costello, J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, *64*(5), 577-584. doi:10.1001/archpsyc.64.5.577
- Cryder, C. H., Kilmer, R. P., Tedeschi, R. G., & Calhoun, L. G. (2006). An exploratory study of posttraumatic growth in children following a natural disaster. *American Journal of Orthopsychiatry*, *76*(1), 65-69. doi:10.1037/0002-9432.76.1.65
- Dunkle, K. L., Jewkes, R. K., Brown, H. C., Yoshihama, M., Gray, G. E., McIntyre, J. A., & Harlow, S. D. (2004). Prevalence and patterns of gender-based violence and revictimization among women attending antenatal clinics in Soweto, South Africa. *American Journal of Epidemiology*, *160*(3), 230-239. doi:10.1093/aje/kwh194
- Eaton, L. G., Kimberly, L. D., & Widrick, R. M. (2007). A review of research and methods used to establish art therapy as an effective treatment method for traumatized children. *The Arts in Psychotherapy*, *34*(3), 256-262. doi:10.1016/j.aip.2007.03.001
- Ehlers, A., & Clark, D.M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(4), 319-345. doi:10.1016/s0005-7967(99)00123-0

- Engelhard, I. M., Lommen, M. J. J., & Sijbrandij, M. (2015). Changing for better or worse? Post-traumatic growth reported by soldiers deployed to Iraq. *Clinical Psychological Science, 3*, 789-796. doi: 10.1177/2167702614549800
- Fincham, D., Altes, L., Stein, D., & Seedat, S. (2009). Posttraumatic stress disorder symptoms in adolescents: Risk factors versus resilience moderation. *Comprehensive Psychiatry, 50*(3), 193-199. doi:10.1016/j.comppsy.2008.09.001
- Finkelhor, D., Turner, H., Omrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics, 124*(5), 1411-1423. doi:10.1542/peds.2009-0467
- Gillies, D., Taylor, F., Gray, C., O'Brien, L., & D'Abrew, N. (2013). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents (Review). *Evidence-Based Child Health: A Cochrane Review Journal, 8*(3), 1004-1116. doi:10.1002/14651858.cd006726.pub2
- Glaser, D. (2000). Child abuse and neglect and the brain: A review. *Journal of Child Psychology and Psychiatry, 41*(1), 99-116. doi:10.1017/s0021963099004990
- Haglund, M. E. M., Nestadt, P. S., Cooper, N. S., Southwick, S. M., & Charney, D. S. (2007). Psychobiological mechanisms of resilience: Relevance to prevention and treatment of stress-related psychopathology. *Development and Psychopathology, 19*(03), 889. doi:10.1017/S0954579407000430.
- Harris, A. H. (2009). The paradox of expressing speechless-terror: Ritual liminality in the creative arts therapies' treatment of posttraumatic distress. *The Arts in Psychotherapy, 36*(2), 94-104. doi:10.1016/j.aip.2009.01.006
- Hall, B. J., Hobfoll, S. E., Canetti, D., Johnson, R., Palmieri, P., & Galea, S. (2010). Exploring the association between posttraumatic growth and PTSD: A national study of Jews and Arabs during the 2006 Israeli-Hezbollah War. *Journal of Nervous and Mental Disease, 198*(3), 180-186. doi:10.1097/nmd.0b013e3181d1411b
- Ho, R. T. H. (2015). A place and space to survive: A dance/movement therapy program for childhood sexual abuse survivors. *The Arts in Psychotherapy, 46*, 9-16. doi:10.1016/j.aip.2015.09.004
- Hodgkin, R., & Newell, P. (2008). *Implementation handbook for the Convention on the Rights of the Child. 3rd edn.* New York, NY: UNICEF.
- Jewkes, R. (2006). Beyond stigma: Social responses to HIV in South Africa. *Lancet, 368*(9534), 430-431. [http://dx.doi.org/10.1016/S0140-6736\(06\)69130-7](http://dx.doi.org/10.1016/S0140-6736(06)69130-7)
- Jewkes, R., Dunkle, K., Nduna, M., Jama, P., & Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect, 34*(11), 833-841. doi:10.1016/j.chiabu.2010.05.002
- Jiang, J., Rickson, D., & Jiang, C. (2016). The mechanism of music for reducing psychological stress: Music preference as a mediator. *The Arts in Psychotherapy, 48*, 62-68. doi:10.1016/j.aip.2016.02.002
- Jung, C. (1997). *Jung on Active Imagination.* Princeton, NJ: Princeton University.

- Kaminer, D., & Eagle, G. (2010). *Traumatic stress in South Africa*. Johannesburg, South Africa: Wits University.
- Kaminer, D. du Plessis, B., Hardy, A., & Benjamin, A. (2013). Exposure to violence across multiple sites among young South African adolescents. *Peace and Conflict: Journal of Peace Psychology*, *19*(2), 112-114. doi:10.1037/a0032487
- Killian, B., & Brakarsh, J. (2004). Therapeutic approaches to sexually abused children. In L. Richter, A. Dawes, & C. Higson-Smith (Eds), *Sexual abuse of young children in Southern Africa* (pp. 367-394). Cape Town, South Africa: HSRC Press.
- Kilmer, R. P., Gil-Rivas, V., Tedeschi, R. G., Cann, A., Calhoun, L. G., Buchanan, T., & Taku, K. (2009). Use of the Revised Posttraumatic Growth Inventory for Children. *Journal of Traumatic Stress*, *22*(3), 248-253. doi:10.1002/jts.20410
- Klorer, P. G. (2005). Expressive therapy with severely maltreated children: Neuroscience contributions. *Art therapy*, *22*(4), 213-220. doi:10.1080/07421656.2005.10129523
- Koch, S., Kunz, T., Lykou, S., & Cruz, R. (2014). Effects of dance movement therapy and dance on health-related psychological outcomes: A meta-analysis. *The Arts in Psychotherapy*, *41*(1), 46-64. doi:10.1016/j.aip.2013.10.004
- Lachman, P., Poblete, X., Ebigbo, P., Nyandiya-Bundy, S., Bundy, R., Killian, B., & Doek, J. (2002). Challenges facing child protection. *Child Abuse & Neglect*, *26*(6-7), 587-617. doi:10.1016/s0145-2134(02)00336-8
- Lanius, R. A., Williamson, P. C., Densmore, M., Boksman, K., Neufeld, R. W., Gati, J. S., & Menon, R. S. (2004). The nature of traumatic memories: A 4-T fMRI functional connectivity analysis. *American Journal of Psychiatry*, *161*(1), 36-44. doi:10.1176/appi.ajp.161.1.36
- Levine, P. A. (2010). *In an unspoken voice: How the body releases trauma and restores goodness*. Berkeley, CA: North Atlantic.
- Levine, S. Z., Laufer, A., Stein, E., Hamama-Raz, Y., & Solomon, Z. (2009). Examining the relationship between resilience and posttraumatic growth. *Journal of Traumatic Stress*, *22*(4), 282-286. doi:10.1002/jts.20409
- Madu, S. N., & Peltzer, K. (2000). Risk factors and child sexual abuse among secondary school students in the Northern Province (South Africa). *Child Abuse & Neglect*, *24*(2), 259-268. doi:10.1016/s0145-2134(99)00128-3
- Madu, S. N. (2003). The relationship between parental physical availability and child sexual, physical and emotional abuse: A study among a sample of university students in South Africa. *Scandinavian Journal of Psychology*, *44*(4), 311-318. doi:10.1111/1467-9450.00350
- Malchiodi, C. A. (2015). *Creative interventions with traumatized children*. New York, NY: Guilford.
- Martin, L., & Kagee, A. (2011). Lifetime and HIV-related PTSD among persons recently diagnosed with HIV. *AIDS and Behavior*, *15*(1), 125-131. doi:10.1007/s10461-008-9498-6
- Myer, L., Smit, J., Roux, L. L., Parker, S., Stein, D. J., & Seedat, S. (2008). Common mental disorders among HIV-infected individuals in South Africa: prevalence, predictors, and validation of brief psychiatric rating scales. *AIDS patient care and STDs*, *22*(2), 147-158. doi:10.1089/apc.2007.0102
- Optimus Study (2016). *Sexual victimisation of children in South Africa Final report of the Optimus Foundation Study: South Africa*. Zurich, Switzerland: UBS Optimus Foundation.

- Orr, P. P. (2007). Art therapy with children after a disaster: A content analysis. *The Arts in Psychotherapy, 34*(4), 350–361. doi:10.1016/j.aip.2007.07.002
- Pretorius, G., & Pfeifer, N. (2010). Group art therapy with sexually abused girls. *South African Journal of Psychology, 40*(1), 63–73. doi:10.1177/008124631004000107
- Rozum, A. L., & Malchiodi, C. A. (2003). *Cognitive-behavioural Approaches*. In: C. A. Malchiodi (Ed). Handbook of Art Therapy. New York, NY: Guilford Press.
- Seedat, S., Van Nood, E., Vythilingum, B., Stein, D. J., & Kammerer, D. (2000). School survey of exposure to violence and posttraumatic stress symptoms in adolescents. *Southern African Journal of Child and Adolescent Mental Health, 12*(1), 38–44. doi:10.1080/16826108.2000.9632366
- Seedat, S., Nyamai, C., Njenga, F., Vythilingum, B., & Stein, D. J. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools. *The British Journal of Psychiatry, 184*(2), 169–175. doi:10.1192/bjp.184.2.169
- Seedat, M., van Niekerk, A., Jewkes, R., Suffla, R., & Ratele, K. (2009). Violence and injuries in South Africa: prioritising an agenda for prevention. *The Lancet, 374*(9694), 1011–1022. doi:10.1016/s0140-6736(09)60948-x
- Shakespeare-Finch, J., & Copping, A. (2006). A grounded theory approach to understanding cultural differences in posttraumatic growth. *Journal of Loss and Trauma, 11*(5), 355–371. doi:10.1080/15325020600671949
- Silverman, W. K., Ortiz, C. D., Viswesvaran, C., Burns, B. J., Kolko, D. J., Putnam, F. W., & Amaya-Jackson, L. (2008). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 156–183. doi:10.1080/15374410701818293
- Sleijpen, M., Haagen, J., Mooren, T., & Kleber, R. J. (2016). Growing from experience: an exploratory study of posttraumatic growth in adolescent refugees. *European Journal of Psychotraumatology, 7*. doi:10.3402/ejpt.v7.28698
- Splevins, K., Cohen, K., Bowley, J., & Joseph, S. (2010). Theories of posttraumatic growth: Cross-cultural perspectives. *Journal of Loss and Trauma, 15*(3), 259–277. doi:10.1080/15325020903382111
- Steele, W., & Raider, M. (2001). Structured sensory intervention for traumatized children, adolescents, and parents. *Trauma and Loss: Research and Interventions, 1*(1), 8–20.
- Suliman, S., Mkabile, S. G., Fincham, D. S., Ahmed, R., Stein, D. J., & Seedat, S. (2009). Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry, 50*(2), 121–127. doi:10.1016/j.comppsy.2008.06.006
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1–18. doi:10.1207/s15327965pli1501_01
- Tol, W. A., Barbui, C., Galappattti, A., Silove, D., Betancourt, T. S., Souza, R., ... van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: linking practice and research. *The Lancet, 378*(9802), 1581–1591. doi:10.1016/s0140-6736(11)61094-5
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work, 38*, 218–235. doi:10.1093/bjsw/bcl343

- Ungar, M., & Liebenberg, L. (2011). Assessing resilience across cultures using mixed methods: Construction of the child and youth resilience measure. *Journal of Mixed Methods Research*, 1558689811400607.
- Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: The MIT.
- Wagnild, G. (2009). A Review of the Resilience Scale. *Journal of Nursing Measurement*, 17(2), 105–113. doi:10.1891/1061-3749.17.2.105
- Wethington, H. R., Hahn, R. A., Fuqua-Whitley, D. S., Sipe, T. A., Crosby, A. E., Johnson, R. L., ... Kalra, G. (2008). The effectiveness of interventions to reduce psychological harm from traumatic events among children and adolescents: a systematic review. *American journal of preventive medicine*, 35(3), 287-313. doi:10.1016/j.amepre.2008.06.024
- Yalom, I. D., & Leszcz, M. (2008). *The Theory and Practice of Group Psychotherapy*. New York, NY: Basic Books.



2

Creative Expressive Arts Therapy as treatment for child trauma: An overview

Nadine van Westrhenen
Elzette Fritz

The Arts in Psychotherapy 2014; 41(5), 527-534
[doi:10.1016/j.aip.2014.10.004](https://doi.org/10.1016/j.aip.2014.10.004)

Acknowledgment of author contributions:
Research design: N van Westrhenen,
Data collection: N van Westrhenen,
Data analysis: N van Westrhenen & E Fritz,
Paper writing: N van Westrhenen & E Fritz

Abstract

To address child trauma caused by events that affect children directly, such as abuse, or indirectly, such as divorce, creative arts therapies are used by creative arts therapists as well as psychologists and counselors. The purpose of this paper is to review such interventions and the research conducted throughout the last 12 years. We considered the methodology used, the population under study and theoretical frameworks, with specific attention given to the reliability, validity and trustworthiness of such research findings. The results showed that the majority of articles reported their findings narratively, with much emphasis placed on the process followed. It was recommended that therapists work closely with researchers to make creative arts therapies less of an outlier in the therapeutic approaches for traumatized children.

Keywords: creative arts therapies, trauma, children, review, intervention studies.

Introduction

Children today experience numerous tragedies and challenges involving household violence, abuse, community violence, terrorist attacks, and natural disasters. Child abuse is a common topic in the media, nationally and internationally (Mann, 2012; New York Times, 2013), and many cases are not reported and are therefore not receiving attention (Hopper, 2013). Except for those events that do receive the media's attention, many countries find themselves in a continuous climate of violence and abuse, the consequence of which is that many children are subject to trauma and posttraumatic stress, and subsequently, they often experience difficulty in developing relationships based on sound attachment (Perry, 2001).

Child trauma is currently defined in the DSM-V under posttraumatic stress disorder (PTSD), which relates to adults as well as children who are six years and older (American Psychiatric Association, 2013). A separate diagnosis, for which diagnostic thresholds have been lowered, is provided for children younger than six years. PTSD is characterized by overwhelming feelings of reexperiencing the traumatic event (e.g., nightmares and intrusive thoughts), avoidance of trauma-related stimuli, negative alterations in cognition and mood (e.g., negative beliefs and feelings of fear or shame) and arousal and reactivity (e.g., concentration difficulties and hypervigilance). Because the diagnostic criteria for PTSD in children have recently been revised and criticized (Scheeringa, Zeanah, & Cohen, 2011), child trauma in this review is considered to be when the child shows symptoms of PTSD after exposure to a traumatic event, and not only when he/she is diagnosed as having PTSD. Perry (2001) and van der Kolk (2002) have written extensively on the complexity of child trauma. Therefore, we know that children respond to trauma differently than adults, based on the developmental stages and attachment relationships that contribute to their resiliency. A seemingly insignificant event from an adult's point of view can be experienced as overwhelming for a child, and this can make it difficult to define trauma in children.

Like play therapy and cognitive behavioral therapy, creative arts therapy is a widespread approach in the treatment of child trauma (Malchiodi, 2008). Creative arts therapy is an umbrella term used to describe the professions of art therapy, music therapy, dance therapy, drama therapy, poetry therapy, and psychodrama. There is growing neurological evidence in favor of using creative arts therapies, specifically for trauma, which is based on the visual and sensational nature of traumatic memories stored in the brain without translation into the narrative (van der Kolk, 2002; Perry, 2008). Furthermore, with the increasing multicultural diversity of groups with which psychologists and counselors worldwide are required to work, creative arts therapies become more important, as they provide means to deal with language barriers and en-

courage the use of historical cultural practices such as music, dancing and arts. They also allow for group and community involvement (Fritz, Veldsman, & Lemont, 2013).

Creative arts therapy has not been empirically addressed until recently, owing to the lack of research training of therapists and difficulties in actually measuring the abstract concepts of creative therapy through empirical methods (Eaton, Kimberly, & Widrick, 2007). The often-unstructured nature of the therapy, which depends on the pace of the client and the severity of symptoms, as well as systemic influences, challenges the execution of clean and controlled experimental designs. To the authors' knowledge, two review studies have been conducted in the last decade, focusing on art therapy as the treatment for traumatized children. Orr (2007) conducted a review of 31 communications consisting of refereed journal articles, news articles, television interviews and books, each of which focused on working with children after a disaster using arts engagement. The results were inconclusive and suggested the need for more reliable research on art therapy. Eaton et al. (2007) identified 12 studies and found that art therapy was used in different contexts as a treatment for children who had a wide variety of negative psychosocial consequences after experiencing a traumatic event. They identified the existing literature as being unclear about the psychosocial symptoms and diagnostic status of the participants. Additionally, inadequate information was often provided regarding the chosen method of art therapy.

The purpose of this paper is to establish the extent of research in the last 12 years that has been based on the use of creative arts therapy and other forms of creative expression as intervention for traumatized children, as well as the value of the evidence available on the topic. The value of the evidence available is established when the qualitative research is trustworthy, the quantitative research is reliable and valid, and all are based on a solid theoretical framework. In our analysis of the articles, we were guided by Rolfe (2006, p. 304) on "acknowledging that the commonly perceived quantitative-qualitative dichotomy is in fact a continuum which requires a continuum of quality criteria." We therefore attempted to appreciate the uniqueness of the respective studies without favoring one approach over another. By reviewing the selected articles, we hoped to obtain answers regarding the use and effect of creative arts therapies in order to identify guidelines that could inform future research in this domain.

Methodology

Procedure

Articles reporting studies were considered for inclusion based on: (1) the clinical population targeted (children between the ages of 0 and 18 who had experienced a traumatic event); (2) the therapy approach used (a creative arts therapy intervention, used by creative art therapists, psychologists and counselors, as well as social workers); (3) the main aim of the article (an evaluation of the intervention program), including all study designs due to the specification of the topic; (4) the year of publication (between 2000 and 2012), used as part of the selection criteria; and (5) their use of the English language. The electronic databases consulted included PUBMED, PsycINFO, ScienceDirect and Web of Science, using key words that were combinations of creative therapy, arts therapy, music therapy, dance therapy, drama therapy, children, trauma, posttraumatic stress and PTSD. Initially, the four databases combined revealed 494 hits. An additional search executed in *The Arts in Psychotherapy* and *Art Therapy* journals, resulted in 22 additional articles. A first selection was made, based on the abstracts, and 29 of 516 met the inclusion criteria. By examining the reference lists of the selected articles and relevant books, another 16 articles were identified. After gaining access to the full texts and carefully reading through all of the 55 selected articles, a final total of 38 met all the inclusion criteria. During this final selection process, two articles needed to be excluded due to their inaccessibility in electronic databases (Morgan & White, 2003; St Thomas & Johnson, 2002). Fig. 1 provides an overview of the project structure of the selection of studies.

Evaluation criteria

The articles included in this review were evaluated by two independent researchers using the four criteria summarized in Table 1. Cohen's Kappa was calculated to determine inter-rater reliability, and there appeared to be substantial agreement between the two researchers' judgments, $K = .666$ (95% CI, .525, .807), $p < .0005$. We used the expanded framework from Lincoln and Guba (1985), proposed by Schuermans (2013), which states that there are four main questions to be asked about any type of research. Depending on the research paradigm, these can be considered by engaging the four concepts further illustrated below.

The **truth value** refers to how one can establish with confidence the "truth" of the findings of a particular analysis for the participants in the study and the context in which it was carried out. It also answers the question on whether the measured effects can be attributed to the treatment under study. The optimum standard for most clinical treatment trials, according to the positivist paradigm (Ponterroto, 2005), is the

random controlled trial. Alternatives are quasi-experimental designs using a control group without randomization. From an interpretivist paradigm, credibility includes using various data collection methods (triangulation) and checking the results with the participants.

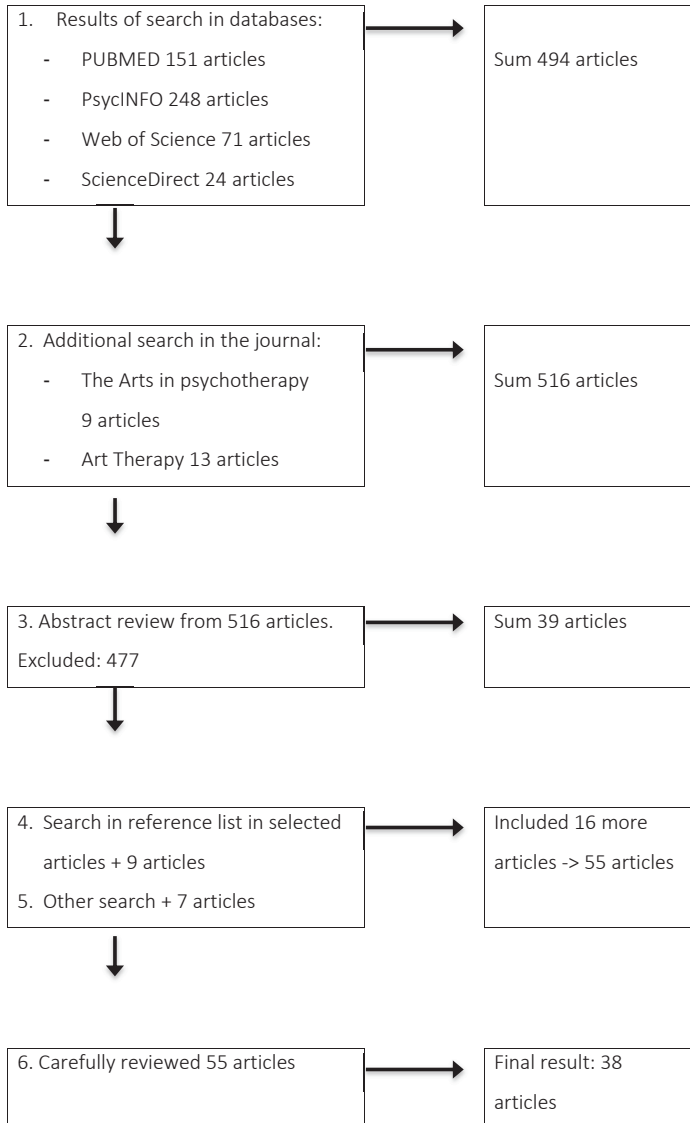


Figure 1: Project structure of the selection of studies

Table 1. Evaluation criteria positivist versus interpretivist research paradigms

	Positivism	Interpretivism
<i>Truth Value</i>	<i>Internal validity</i>	<i>Credibility</i>
	++ Blind assessment & standardized instrument etc.	++ Data triangulation & searching for negative evidence etc.
	+ Only one of these	+ Only one of these
	- None of the above	- None of the above
<i>Applicability</i>	<i>External validity</i>	<i>Transferability</i>
	++ Random sampling & detailed context descriptions etc.	++ Program process & detailed participant descriptions etc.
	+ Only one of these	+ Only one of these
	- None of the above	- None of the above
<i>Consistency</i>	<i>Reliability</i>	<i>Dependability</i>
	++ Detailed measurement procedure & reliability tests published etc.	++ Raw data extracts (artefacts, quotations) & detailed analysis description etc.
	+ Only one of these	+ Only one of these
	- None of the above	- None of the above
<i>Neutrality</i>	<i>Objectivity</i>	<i>Confirmability</i>
	++ Biases & limitations addressed etc.	++ Multiple researchers & researcher bias addressed etc.
	+ Only one of these	+ Only one of these
	- None of the above	- None of the above

Second, how can the **applicability of the findings** be determined for other contexts and other participants? Although qualitative studies do not have the purpose of generalizing to the rest of the population, unless the original researcher has provided a detailed description of the context of the original case study, future generations of researchers are not able to find out whether the conclusions can be exported to their own research settings. For quantitative studies, randomized sampling and minimizing attrition is crucial.

The **consistency** is determined by establishing whether the findings of the study are replicable in another similar study. For both qualitative and quantitative studies, the research procedure and analysis need to be consistent and clearly described through a trail of evidence.

Lastly, **neutrality** refers to the findings not being influenced by the researchers' bias or specific interests in the study. Lengthy quotations and openness about gaps and limitations increases neutrality.

Results

The final results include 38 articles (see Tables 4 and 5 for all the sample characteristics, treatment characteristics and methodological characteristics per study). Only two articles from this selection were also included in the review conducted by Orr (2007), and six were included in the review by Eaton et al. (2007). The literature search was carried out between 2000 and 2012, and the different years were similarly represented. Although the majority of the studies originated in the United States of America (44.7%), the other studies in the selection originated in Australia (5.3%), Canada (21.1%), Germany (2.6%), Israel (7.9%), Russia (2.6%), Sierra Leone (2.6%), South Africa (2.6%), Sri Lanka (2.6%), Taiwan (2.6%), and the United Kingdom (2.6%). Additionally, one study covered three community-based interventions conducted in Palestine, Thailand and Uganda.

Sample characteristics

The studied age groups ranged from 16 months to 18 years, and the group sizes varied between 1 and ± 3100 . Nine studies included girls (23.7%), seven included boys (18.4%), and eleven included both boys and girls (28.9%). The remaining studies were not explicit about the gender. The majority of the studies included traumatic abuse, sexual abuse, attachment trauma, and domestic violence (57.9%), followed by war, including forced relocation (15.8%). Five studies were specifically devoted to the aftermath of the World Trade Center attacks of 2011. A large number of studies included participants who showed symptoms of PTSD (23.7%), with 15.8% of the studies including participants with fully diagnosed PTSD. Eighteen did not specify the diagnosis of the participants (47.4%). A summary of the study characteristics is shown in Table 2.

Treatment characteristics

The majority of the studies included in the review used art therapy as the creative treatment (73.7%). Drama, dance/movement and music were all included three times in the review. There was one study that used cinema therapy. Half of the selected studies described short-term interventions (reported on long-term intervention programs (34.2%), between four months and four years in duration. Three acute interventions were described (7.9%); these were one-day programs run hours or days after the traumatic event. Three studies did not specify the duration or frequency of the intervention (7.9%). Of the studies, 55.3% reported explicit treatment objectives, 76.3% included descriptions of the program process and activities, and 57.9% displayed artifacts in the article to support the findings (50.0%), ranging from two to twelve sessions run either weekly or daily. Thirteen studies reported on long-term intervention programs (34.2%), between four months and four years in duration. Three acute interventions were described (7.9%); these were one-day programs run hours or days after the trau-

matic event. Three studies did not specify the duration or frequency of the intervention (7.9%). Of the studies, 55.3% reported explicit treatment objectives, 76.3% included descriptions of the program process and activities, and 57.9% displayed artefacts in the article to support the findings.

Table 2: Study characteristics summarized

Sample Characteristics	N	%	Treatment Characteristics	N	%	Methodology Characteristics	N	%
<i>Gender</i>			Artefacts	22	57.9	Mixed	3	7.9
Boys	7	18.4	Programme process	29	76.3	Qualitative	29	76.3
Girls	9	23.7	Treatment objectives	21	55.3	Quantitative	6	15.8
Mixed	11	28.9	<i>Method of treatment</i>			<i>Design</i>		
Unknown	11	28.9	Art	28	73.7	Case report ⁶	17	44.7
<i>Traumatic event</i>			Cinema	1	2.6	Case series ⁷	2	5.3
Diverse	1	2.6	Dance/Movement	3	7.9	Case study ⁸	10	26.3
Injury	2	5.3	Drama	3	7.9	Grounded theory	1	2.6
Medical condition	1	2.6	Music	3	7.9	Pre experiment ⁹	3	7.9
Natural Disaster	1	2.6	<i>Therapeutic intervention</i>			Quasi Experiment ¹⁰	2	5.3
Relational ¹	22	57.9	Acute ³	3	7.9	True Experiment ¹¹	3	7.9
Terrorism	5	13.2	Short term ⁴	19	50.0	<i>Main Instrument</i>		
War	6	15.8	Long term ⁵	13	34.2	Case conceptualization	9	23.7
<i>Diagnosis</i>			Not specified	3	7.9	Drawings analysis	3	7.9
Other ²	5	13.2				Interview	1	2.6
PTSD	6	15.8				Questionnaire	7	18.4
Symptoms of PTSD	9	23.7				Structured observation	1	2.6
Unknown	18	47.4				Unstructured observation	17	44.7

¹Abuse, sexual abuse, attachment trauma, complex trauma, domestic violence, father's drug addiction, parental divorce; ²traumatic grief, acquired brain injury, foetal alcohol syndrome, symptoms of depression. ³within hours to days after the traumatic event, one session; ⁴varies between two sessions to three months; ⁵four months to several years, ⁶Non-empirical report to illustrate learnings in case to educate and formulate new research questions, ⁷Description of series of cases, ⁸Empirical, in-depth analysis of case, ⁹non-randomized trial without control participants, ¹⁰non-randomized controlled trial, ¹¹randomized controlled trial.

Research methodology

The majority of the articles were qualitative (76.3%), compared to 15.8% quantitative and three mixed-methods designs (7.9%). Of the studies, 44.7% used a so-called 'case report' format, defined as a non-empirical report to illustrate the learnings from a clinical case to educate and formulate new research questions. These studies often lacked a detailed case conceptualization and a structured method of observation. Two studies had a case series design, and a more empirical and in-depth analysis of cases

was found in ten studies using a case study design. Three studies (7.9%) included a randomized control trial, and two studies had a quasi-experimental design using a control group without randomization. Three studies (7.9%) had a so-called pre-experimental design; they had a non-randomized trial without control participants. One study (2.6%) used a grounded theory design.

The instruments used in the studies were mainly unstructured observations (44.7%), case conceptualizations (23.7%), and questionnaires (18.4%). Three studies analyzed drawings, one used a semi-structured interview approach, and one study conducted a structured observation with video analysis.

Applying the evaluation criteria as described in Table 1, 57.9% of the studies appeared to be subject to biases. The truth value was low in 50.0% of the studies. Applicability was fair to good for 50%, and no information on generalization was provided in the other 50% of the studies. Lastly, consistency appeared to be good for 76.3% of the studies, and 23.7% of the studies were considered to be unreliable. See Table 5 for a detailed breakdown of these ratings.

Use of theoretical frameworks

The most popular theoretical frameworks used in the research on creative arts therapies with traumatized children are summarized in Table 3. The most frequently used models were psychoanalysis and neuropsychological frameworks, followed by attachment and sociocultural theory. The related psychoanalytical constructs were mainly Winnecott's object relations theory, transference and countertransference. Neuropsychological evidence of the storage of memory in nonverbal parts of the brain was also a popular theoretical framework used to support the employment of creative methods of intervention. Furthermore, attachment disruptions resulting in mistrust and a lack of self-image could be addressed through creative therapy in a non-threatening manner. The cultural foundations of creative arts therapy were referred to as appropriate for working with different ethnic groups, avoiding language barriers and using something that is close to the children's cultural roots. The traumatic stress theory and cognitive theory were also mentioned several times. Developmental models (i.e., the inability of the child to verbalize his or her thoughts), trauma theory and a biopsychosocial model were also used as foundations for creative arts therapy approaches.

Table 3 Theories in selected studies

Theoretical orientation	Specific models	No of studies
Psychoanalysis constructs	Transference and countertransference, ego, Jung collective unconsciousness, Winnecott's object relations theory, theory of intersubjectivity	12
Neuropsychological models	Storage and retrieval of traumatic memories	11
Attachment theory	Bowlby, Ainsworth	10
Sociocultural Theory	Conservation of resources theory, family systems theory	9
Trauma biology	Somatic stress theory, psychophysiological memory	8
Cognitive theory	Mindfulness, just-world theory	7
Developmental models	Piaget's cognitive developmental stages, creative development	3
Trauma theory	Complex trauma, repetition compulsion	2
Multivariate model	Bio-psychosocial	1

Table 4: Sample characteristics

Author	Sample size	Age	% Female	Traumatic event	Diagnosis
Ben-Asher et al (2002)	1	5	100	Sexual abuse	-
Berberian (2003)	±3100	-	-	Terrorism	-
Buck & Bethesda (2002)	-	-	-	Terrorism	-
Chapman et al (2001)	85	7-17	29.4	Injury	PTSD
Chilcote (2007)	113	5-13	100	Natural disaster	-
Coholic (2007)	35	8-15	60	Complex trauma	symptoms of PTSD
Czamanski-Cohen (2010)	4	13-14	100	Forced dislocation	symptoms of PTSD
DiSunno et al (2011)	70-100	4-15	-	Terrorism	traumatic grief
Gerteisen (2008)	7	10-14	14.3	Abuse	Fetal Alcohol syndrome
Haen (2005)	12	6-15	-	Terrorism	traumatic grief
Haen & Weber (2009)	3	9-14	66	Domestic violence & abuse	-
Hanney & Kozłowska (2002)	3	3-14	0	Complex trauma	symptoms of PTSD
Harber (2011)	1	17	0	Domestic violence	-
Harnden et al (2004)	1	14	100	Sexual abuse	PTSD and depression
Harris (2007)	12	15-18	0	War	-
Howie et al (2002)	10	3-13	60	Terrorism	symptoms of PTSD
Klorer (2005)	2	4-7	50	Abuse	-
Kozłowska & Hanney (2001)	5	5-8	20	Domestic violence & abuse	PTSD
Lai (2011)	-	-	-	Domestic violence	-
Lev-Wiesel & Liraz (2007)	60	9-14	55	Fathers' drug addiction	-
Lyshak-Stelzer et al (2007)	29	13-18	45	Diverse	PTSD
Mallay (2002)	1	10	0	Injury	Acquired Brain Injury & PTSD
Marsick (2010)	3	10-12	66	Parental divorce	-

Table 4: Sample characteristics (continued)

Author	Sample size	Age	% Female	Traumatic event	Diagnosis
McCullough (2009)	1	12	0	Parental divorce	symptoms of depression
Meshcheryakova (2012)	±20	7-12	-	Complex trauma	-
Osborne (2012)	-	-	-	War	PTSD
Pifalo (2002)	13	8-17	100	Sexual abuse	symptoms of PTSD
Pifalo (2006)	41	8-16	-	Sexual abuse	symptoms of PTSD
Pretorius & Pfeifer (2010)	25	8-11	100	Sexual abuse	symptoms of PTSD
Robarts (2006)	1	7	100	Sexual abuse	PTSD
Robb (2002)	-	-	-	Attachment trauma	symptoms of PTSD
Rousseau & Heusch (2000)	25	-	-	Forced dislocation	-
Rousseau et al (2003)	36	6-12	-	Forced dislocation	-
Rousseau et al (2007)	123	12-18	40	Forced dislocation	-
Slayton (2012)	8	13-17	0	Complex trauma	-
Strehlow (2009)	1	8	100	Sexual abuse	-
Testa & McCarty(2004)	3	11-12	0	Complex trauma	symptoms of PTSD
Tortora (2010)	1	16 months	100	Medical condition	-

- Information not available in article

Table 5: Treatment & Methodological characteristics

Author	Therapy	Duration Intervention	Treatment objective	Design	Truth value	Applicability	Consistency	Neutrality
Ben-Asher et al (2002)	Dance	-	N	Case report	-	-	-	+
Berberian (2003)	Art	Short	Y	Case report	-	-	+	-
Buck & Bethesda (2002)	Art	Short	N	Case report	+	-	+	+
Chapman et al (2001)	Art	Acute	Y	True experiment	++	++	+	++
Chilcote (2007)	Art	Short	N	Case report	+	-	+	+
Coholic (2007)	Art	Short	Y	Grounded theory	++	+	++	+
Czamanski-Cohen (2010)	Art	Long	N	Case study	+	+	++	+
DiSunno et al (2011)	Art	Short	Y	Case report	-	-	+	+
Gerteisen (2008)	Art	Short	Y	Case report	-	+	+	-
Haen (2005)	Drama	Short	Y	Case report	-	-	-	-
Haen & Weber (2009)	Drama	-	N	Case report	-	-	-	-
Hanney & Kozłowska (2002)	Art	Long	Y	Case study	-	+	+	+
Harber (2011)	Art	Long	Y	Case study	-	+	+	-
Harnden et al (2004)	Art	Long	Y	Case study	+	++	++	-
Harris (2007)	Dance	Long	Y	Pre experimental	+	+	+	-
Howie et al (2002)	Art	Acute	N	Case report	-	+	-	-
Klorer (2005)	Art	Long	N	Case report	-	-	-	-
Kozłowska & Hanney (2001)	Art	Short	Y	Case report	+	++	+	+
Lai (2011)	Art	Short	Y	Case report	-	-	+	-
Lev-Wiesel & Liraz (2007)	Art	Short	N	True experiment	+	+	++	++
Lyshak-Stelzer et al (2007)	Art	Long	Y	True experiment	++	++	++	++
Mallay (2002)	Art	Long	Y	Case study	-	++	++	-
Marsick (2010)	Cinema	-	N	Case series	+	-	++	+
McCullough (2009)	Art	Long	N	Case study	-	++	+	-
Meshcheryakova (2012)	Art	Long	N	Case report	-	-	+	+
Osborne (2012)	Music	Acute	N	Case report	-	-	-	-
Pifalo (2002)	Art	Short	Y	Pre experimental	+	+	+	+
Pifalo (2006)	Art	Short	N	Pre experimental	+	-	+	-
Pretorius & Pfeifer (2010)	Art	Short	Y	Quasi experimental	+	+	++	++
Robarts (2006)	Music	Long	Y	Case study	+	++	-	-
Robb (2002)	Art	Short	Y	Case report	-	-	+	-
Rousseau & Heusch (2000)	Art	Short	Y	Case study	+	-	+	-
Rousseau et al (2003)	Art	Short	Y	Case study	+	-	+	-
Rousseau et al (2007)	Drama	Short	Y	Quasi experimental	+	-	++	++

Table 5: Treatment & Methodological characteristics (continued)

Author	Therapy	Duration Intervention	Treatment objective	Design	Truth value	Applicability	Consistency	Neutrality
Slayton (2012)	Art	Short	N	Case report	-	-	+	-
Strehlow (2009)	Music	Long	N	Case study	-	+	-	-
Testa & McCarty(2004)	Art	Short	N	Case report	-	+	-	-
Tortora (2010)	Dance	Long	N	Case series	+	-	+	-

Acute = 1 session within hours to days after the traumatic event, short = between two sessions to three months, Long = four months to several years, Y = objective defined in article, N = Objective not in article, - = poor, + = fair, ++ = good.

Discussion

Previous reviews on the use of arts therapy for traumatized children, such as Eaton et al. (2007), indicated that the effectiveness of the interventions could not be determined due to the poor quality of research. In this review, we tried to establish the value of the evidence supporting its use in studies from the previous 12 years. We came to a similar conclusion regarding the general body of research on creative arts therapies, with 44.7% of the selected articles found to be non-empirical and merely descriptive of the therapist's or the child's personal experience (using an unstructured method of data collection lacking a detailed description of the case), and not adding in a pragmatic way to the knowledge base of creative arts therapy interventions with children after trauma. We are aware that important studies may have been omitted in the selection of articles considered for this paper; therefore, we would welcome feedback on additional studies that fit the inclusion criteria. Additionally, it must be mentioned that the evaluation process in this review had its own limitations, as the researchers did not reach perfect agreement, and is something that could possibly be refined in future research. That said, the gaps in information in the selected studies, as summarized in Tables 4 and 5, calls for a number of recommendations, which are summarized below.

Improving research methodology

Establishing the value of the evidence in this selection of studies was challenging because the objectives, designs and methodologies were at times unclear due to insufficient information provided. For instance, Berberian (2003) reported on engaging children in a mural project after the attacks of September 2001. Although reference is made to cultural awareness in the face of emerging anti-Arab sentiments, no indication was provided regarding the context of the school or demographics of the participating children. Similarly, Buck and Bethesda (2002 p. 165) shared their experiences

of using the arts after September 2011, referring once to a “culturally diverse magnet school” with immigrant children, but not specifying what this meant in terms of the participants or how considerations for cultural diversity directed their activities and engagement with the participants.

The case report studies in this review did not make use of data triangulation, nor did the unstructured observations seem to be a solid method to measure the effects of the treatment. Detailed descriptions of the participants’ behavioral patterns could be provided more extensively, considering witnesses such as parents, caregivers, teachers, friends and the participants themselves, as well as their reflections on change linked to creative arts engagement. Qualitative research on arts-based interventions needs to be rigorous (Morse, Barrett, Mayan, Olson, & Spiers, 2002) and detailed in order for the reader to obtain a clear understanding of the research participants and the process followed.

Often, it is argued that it is impossible to conduct laboratory-based research on creativity under controlled conditions (Dietrich & Kanso, 2010; Eaton et al., 2007), and therefore, people shy away from randomized control research. This may be true for the artistic process in the therapy itself, which is unstructured and client-centered. It however does not eliminate the possibility of measuring the effect of creative arts therapy on the client’s wellbeing, for instance. This is, in our opinion, possible, as much as it is possible to measure the effect of any other intervention study. As long as the therapy goals, concepts and process followed are clearly defined, we believe that a qualitative or quantitative study can be conducted. The reason behind the lack of quality studies in this area may be that many art therapists find themselves working as practitioners in the field and not necessarily in the world of academia, and hence researching their practice and publishing articles is of secondary importance to them. In addition, Eaton et al. (2007) also said that few creative arts therapists are trained in experimental research methods, and few doctoral level clinicians are trained in both research methods and creative arts therapies. Another reason for the lack of high quality studies may be a lack of funding in this area for research, resources and facilities for creative arts therapists. For instance, Pretorius and Pfeifer (2010) motivated that due to logistical considerations, groups were organized per the children’s homes, and Rousseau et al. (2007) did not have complete randomization, as they selected one existing class at school as the experimental group and another as the control group. The practice does not always allow for a perfect clean-cut randomized control trial, especially in this field of work.

Generally, the investigation of any psychotherapy has, in the past, predominantly focused on adults and not so much on children. This is not different for the creative arts therapies, and more research needs to be conducted with children in order to increase the body of knowledge.

Considering the limitations that we identified in the selected articles, we see a need for more collaboration between academics and therapists in researching creative arts therapies, especially in the context of children who have encountered trauma.

Theoretical foundations

There are multiple theoretical frameworks informing creative arts therapies through an interdisciplinary approach. Researchers in this domain, therefore, need to be specific in terms of informing the reader about their theoretical lenses, and subsequently, the value of their findings in terms of contributing to existing theory. This is in contrast to other popular trauma interventions such as cognitive behavioral therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR), where there is one mainstream theoretical framework. This difference can be partially explained by taking into account that creative arts therapy is used in different ways in a variety of settings by creative arts therapists as well as psychologists, counselors and social workers. Hogan (2009) provided an overview of the use of British art therapy practice, including art as an adjunct in verbal psychotherapy, analytic art therapy focused on the 'transference relationship,' art therapy in groups, and arts engagement as a healing power itself, without verbal analysis. For this specific review, no distinction was made between the different types of creative art therapy practice, and similar evaluation criteria were applied. Based on our findings, it can be argued that the different practices should be reviewed in a different manner. The results definitely highlight the importance of a common international framework and a clear understanding for the use of these interventions.

Additionally, the diversity of theoretical perceptions can be explained by the lack of solid research in this area, maintaining the status quo. The majority of articles in this review appeared to engage in deductive research, which begins with a theoretical framework from which hypotheses are derived and tested. If observations in the research are not specific, the results will not be sufficiently convincing to falsify any theoretical claims, thus limiting the possibility of deriving mainstream theoretical frameworks in this field. An alternative would be to conduct research from an inductive approach, seeing what emerges out of the therapeutic process, and subsequently contributing towards theory development.

Conclusion

We believe that research in the domain of creative arts therapy is relevant in terms of quantitative as well as qualitative and mixed-method studies. Existing studies over the last 12 years have shown methodological weaknesses that, in our opinion, allowed the scientific foundation in this therapeutic field to fall behind other popular therapeutic approaches. This review study shows that researchers and art therapists need to work more closely together in the future in order to establish a higher standard for the research in this field and to develop comprehensive theoretical frameworks.

Acknowledgements: Language editing was funded by The South Africa Netherlands Research Programme on Alternatives in Development (SANPAD) [project number 10/24].

References

(Articles with * were included in the literature review)

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
- * Ben-Asher, S., Koren, B., Tropea, E. B., & Fraenkel, D. (2002). Case study of a five year old Israeli girl in movement therapy with case discussion. *American Journal of Dance Therapy, 24*(1), 27-43.
- * Berberian, M. (2003). Communal rebuilding after destruction. *Psychoanalytic Social Work, 10*(1), 27-41.
- * Buck, H., & Bethesda, N. C. C. (2002). Rebuilding the bridge: An Arab-American art therapist responds to 9/11. *Art Therapy, 19*(4), 164-167.
- * Chapman, L., Morabito, D., Ladakakos, C., Schreier, H., & Knudson, M. (2001). The effectiveness of art therapy interventions in reducing post traumatic stress disorder (PTSD) symptoms in pediatric trauma patients. *Art Therapy, 18*(2), 100-104.
- * Chilcote, R. L. (2007). Art therapy with child tsunami survivors in Sri Lanka. *Art Therapy, 24*(4), 156-162.
- * Coholic, D., Loughheed, S., & Cadell, S. (2009). Exploring the helpfulness of arts-based methods with children living in foster care. *Traumatology, 15*(3), 64-71.
- * Czamanski-Cohen, J. (2010). "Oh! Now I remember": The use of a studio approach to art therapy with internally displaced people. *The Arts in Psychotherapy, 37*(5), 407-413.
- Dietrich, A., & Kanso, R. (2010). A review of EEG, ERP, and Neuroimaging studies of creativity and insight. *Psychological Bulletin, 136*(5), 822-848.
- * DiSunno, R., Linton, K., & Bowes, E. (2011). World Trade Center tragedy: Concomitant healing in traumatic grief through art therapy with children. *Traumatology, 17*(3), 47-52.
- Eaton, L. G., Kimberly, L. D., & Widrick, R. M. (2007). A review of research and methods used to establish art therapy as an effective treatment method for traumatized children. *The Arts in Psychotherapy, 34*, 256-262.
- Fritz, E., Veldsman, T. & Lemont, S. (2013). Forging collaborative relationships through creative expressive arts Therapy as school community intervention. *Education as change, 17*(1), 77 – 88.
- * Gerteisen, J. (2008). Monsters, monkeys, & mandalas: Art therapy for children experiencing the effects of trauma and fetal alcohol spectrum disorder (FASD). *Art Therapy, 25*(2), 90-93.
- * Haen, C. (2005). Rebuilding Security: Group Therapy with Children Affected by September 11. *International Journal of Group Psychotherapy, 55*(3), 391-414.
- * Haen, C., & Weber, A. M. (2009). Beyond retribution: Working through revenge fantasies with traumatized young people. *The Arts in Psychotherapy, 36*(2), 84-93.
- * Hanney, L. & Kozłowska, K. (2002). Healing traumatized children: creating illustrate storybooks in family therapy. *Family Process, 41*(1), 37-65.
- * Harber, K. (2011). Creating a framework: Art therapy elicits the narrative. *Art Therapy, 28*(1), 19-25.

- * Harnden, B., Rosales, A. B., & Greenfield, B. (2004). Outpatient art therapy with a suicidal adolescent female. *The Arts in Psychotherapy*, *31*(3), 165-180.
- * Harris, D. A. (2007). Pathways to embodied empathy and reconciliation after atrocity: Former boy soldiers in a dance/movement therapy group in Sierra Leone. *Intervention*, *5*(3), 203-231.
- Hogan, S. (2009). The art therapy continuum: A useful tool for envisaging the diversity of practice in British art therapy. *International Journal of Art Therapy*, *14*(1), 29-37.
- Hopper, J (2013). *Child abuse. Statistics, research and resources*. Accessed at <http://www.jimhopper.com/abstats/> 1 July 2013.
- * Howie, P., Burch, B., Conrad, S., & Shambaugh, S. (2002). Releasing trapped images: Children grapple with the reality of the September 11 attacks. *Art Therapy*, *19*(3), 100-105.
- * Klorer, P. G. (2005). Expressive Therapy with Severely Maltreated Children: Neuroscience Contributions. *Art Therapy*, *22*(4), 213-220.
- * Kozłowska, K., & Hanney, L. (2001). An art therapy group for children traumatized by parental violence and separation. *Clinical Child Psychology and Psychiatry*, *6*(1), 49-78.
- * Lai, N. (2011). Expressive arts therapy for mother-child relationship (EAT-MCR): A novel model for domestic violence survivors in Chinese culture. *The Arts in Psychotherapy*, *38*(5), 305-311.
- * Lev-Wiesel, R., & Liraz, R. (2007). Drawings vs. narratives: Drawing as a tool to encourage verbalization in children whose fathers are drug abusers. *Clinical Child Psychology and Psychiatry*, *12*(1), 65-75.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: SAGE.
- * Lyshak-Stelzer, F., Singer, P., St. John, P., & Chemtob, C. M. (2007). Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study. *Art Therapy*, *24*(4), 163-169.
- Malchiodi, C. A. (Ed.) (2008). *Creative interventions with traumatized children*. New York, USA: The Guilford Press.
- * Mallay, J. N. (2002). Art therapy, an effective outreach intervention with traumatized children with suspected acquired brain injury. *The Arts in Psychotherapy*, *29*(3), 159-172.
- Mann, D (2012). Child abuse injuries have risen, studies find. *HealthDay reporter*. 1 October 2012.
- * Marsick, E. (2010). Cinematherapy with preadolescents experiencing parental divorce: A collective case study. *The Arts in Psychotherapy*, *37*, 311-318.
- * McCullough, C. (2009). A child's use of transitional objects in art therapy to cope with divorce. *Art Therapy*, *26*(1), 19-25.
- * Meshcheryakova, K. (2012). Art therapy with orphaned children: Dynamics of early relational trauma and repetition compulsion. *Art Therapy*, *29*(2), 50-59.
- Morgan, K. E., & White, P. R. (2003). The functions of art-making in CISD with children and youth. *International Journal of Emergency Mental Health*, *5*(2), 61-76.
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers J. (2002) Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 1-19.
- New York Times (2013). *Child abuse and neglect*. Monday 1 July 2013.

- Orr, P. P. (2007). Art therapy with children after a disaster: A content analysis. *The Arts in Psychotherapy, 34*(4), 350-361.
- * Osborne, N. (2012). Neuroscience and “real world” practice: music as a therapeutic resource for children in zones of conflict. *Annals of the New York Academy of Sciences, 1252*, 69-76.
- Perry, B. D. (2001). Bonding and attachment in maltreated children. Consequences of emotional neglect in childhood. *The Child Trauma Academy*. www.ChildTraumaAcademy.org
- Perry, B. D. (2008). Foreword. In: C.A Malchiodi (Ed.). *Creative interventions with traumatized children*. New York, USA: The Guilford Press.
- * Pifalo, T. (2002). Pulling out the thorns: Art therapy with sexually abused children and adolescents. *Art Therapy, 19*(1), 12-22.
- * Pifalo, T. (2006). Art therapy with sexually abused children and adolescents: extended research study. *Art Therapy, 23*(4), 181-185.
- Ponterroto, J. (2005). Qualitative research in counseling psychology: A primer on research paradigms and Philosophy of Science. *Journal of Counselling Psychology, 52*(2), 126 – 136.
- * Pretorius, G., & Pfeifer, N. (2010). Group art therapy with sexually abused girls. *South African Journal of Psychology, 40*(1), 63-73.
- * Robarts, J. (2006). Music therapy with sexually abused children. *Child Psychology and Psychiatry, 11*(2), 249-269.
- * Robb, M. (2002). Beyond the orphanages: Art therapy with Russian children. *Art Therapy, 19*(4), 146-150.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative Research. *Journal of Advanced Nursing, 53*(3), 304 – 310.
- * Rousseau, C., Benoit, M., Gauthier, M. F., Lacroix, L., Alain, N., Rojas, M. V., Moran, A., & Bourassa, D. (2007). Classroom drama therapy program for immigrant and refugee adolescents: a pilot study. *Clinical Child Psychology and Psychiatry, 12*(3), 451-465.
- * Rousseau, C., & Heusch, N. (2000). The trip: A creative expression project for refugee and immigrant children. *Art Therapy, 17*(1), 31-40.
- * Rousseau, C., Lacroix, L., Bagilishya, D., & Heusch, M. (2003). Working with Myths: Creative Expression Workshops for Immigrant and Refugee Children in a School Setting, Art Therapy: *Journal of the American Art Therapy Association, 20*(1), 3-10.
- Scheeringa, M. S., Zeanah, C. H., & Cohen, J. A. (2011). PTSD in children and adolescents: Toward an empirically based algorithm. *Depression and Anxiety, 28*(9), 770-782.
- Schuermans, N. (2013). Towards rigour in qualitative research. *Human Geography PhD Research Seminar: Leuven*
- * Slayton, S. C. (2012). Building community as social action: An art therapy group with adolescent males. *Arts in Psychotherapy, 39*(3), 179-185.
- * Strehlow, G. (2009). The use of music therapy in treating sexually abused children. *Nordic Journal of Music Therapy, 18*(2), 167-183.
- St. Thomas, B., & Johnson, P. (2002). In their own voices: Play activities and art with traumatised children. *Groupwork: An Interdisciplinary Journal for Working with Groups, 13*(2), 34-48.

- * Testa, N., & McCarty, J. B. (2004). The use of murals in preadolescent inpatient groups: An art therapy approach to cumulative trauma. *Art Therapy, 21*(1), 38-41.
 - * Tortora, S. (2010). Ways of Seeing: An early childhood integrated therapeutic approach for parents and babies. *Clinical Social Work Journal, 38*(1), 37-50.
- Van Der Kolk, B. A. (2002). In terror's grip: Healing the ravages of trauma. *Cerebrum, 4*, 34-50.



3

Reflections of social workers on working with abused children in South Africa

Nadine van Westrhenen
Elzette Fritz
Adri Vermeer
Rolf Kleber

Child Abuse Research in South Africa 2017: 18(1), 1-10

Acknowledgment of author contributions:
Research design: N van Westrhenen,
Data collection: N van Westrhenen,
Data analysis: N van Westrhenen & E Fritz,
Paper writing: N van Westrhenen, E Fritz, A Vermeer & R Kleber

Abstract

Child abuse rates in South Africa are extremely high, while social work is a scarce skill, and the context social workers are working in is subject to complicated cultural, religious and socio-economic dynamics. This article explores the experiences of social workers working with severely abused children in a clinic in South Africa. An improved understanding of these experiences can enable support and resources to social workers and related professionals in order to facilitate children's recovery after trauma. Eight semi-structured interviews were conducted. Using an inductive approach to thematic analysis, data were coded independently by two researchers resulting in three main themes. The first theme illustrated that social workers working with traumatized children appeared vulnerable to the risk of compassion fatigue, due to the high caseloads and traumatic nature of their job. The second theme emphasized a strong need for further training, for instance to facilitate a child's disclosure during forensic assessment, and a need for incorporation of indigenous knowledge in therapy to better fit the cultural context. The third theme highlighted the challenge for social workers working with the justice system and with clients across different cultural belief systems. Recommendations for future practise and research based on these findings included adjustment and validation of existing therapy methods to the specific cultural context, and improved efficiency of health care systems enhancing supervision and education for social workers.

Key words: child abuse, South Africa, social work, children's rights, compassion fatigue

Vignette: A Case of Rape in a Multicultural Society

Social worker: Ok. I saw a teenager not so long ago... This kid had nightmares, sleeping problems and could hardly sleep in the night. And in the morning when she woke up she would have physical pains all over her body. So the family took her to the family prophet, who previously had done many things for the family. On arrival there the man was happy to work with the child and asked the parents to wait outside. So the parents waited outside and this child was asked by the prophet to undress. First of all she removes her jeans and her belt. And hesitantly removes her top. And then the prophet says, can you please undress. She then removes her bra and remains in her underwear. Then the prophet insists that she should remove everything from her body. She obliges and so she removes everything. The prophet starts applying oil onto her body to make all evil stuff go away in the night. So in the process of doing that, he gets to her breasts, and the way he applies it makes her very uncomfortable... He gets to the private part, he starts fingering her. Maybe a bit uncomfortable, but she went there with her parents. Then the prophet invites her to another room where there is a big pot of water that just boiled. And then he says she should cover herself with that, with the blanket for her to inhale stuff from that pot. After inhaling that stuff she is so dizzy, she quickly falls onto the bed that is close by. When she falls onto the bed this man then penetrates her. First, second, and three times... So now when she dresses up she is not so sure if this was a violation of her rights or it was part of the cleansing ceremony. The prophet invites the parents to the house. Then he says this is the amount that they have to pay, they pay, then they drive off. At home, she can hardly sleep. She is thinking that this was rape. So she calls her twin brothers to say, guys this is what happened, and they say, no you were raped, you should open a case at the police station. And that is how this whole thing was reported....

Interviewer: And how did you feel in this situation?

Social worker: God, I was so terrified... we have different cultural believes. I am Christian, the one person believes in prophets, the one person believes in traditional healers... There is nothing like prophets in my world. I don't believe in that, but look, [laughing] I appear at work, people come with all this stuff.. You just have to be accepting, welcoming. So it just let me with my mind raising up and down. Oh my word, oh my word...!

Introduction

The vignette above speaks of sexual abuse committed under the cloak of a traditional healing ritual. The case is an example from a multicultural society, illustrating how a discrepancy in cultural belief systems between the social worker and the client can complicate understanding and treatment of child abuse. Scientific knowledge of traumatic stress is mostly based on research coming from studies conducted in Western societies and most resources and experts in the field of traumatic stress studies are located in the first world context. Ironically, rates of exposure to traumatic stress outside of Western societies are much more dramatic, while resources and professional health care workers in the third world context are scarce and systems underdeveloped.

Western trauma treatments and research findings cannot be automatically transferred into other cultural settings, because they might lack the expertise and resources to do so, and indigenous cultural practises and belief systems are not always supported in such treatments. This is a considerable gap in trauma literature and a barrier to develop evidence-based trauma practises in a developing context. A better understanding of the context and its challenges can enable support and resources to social workers and related professionals working with child abuse. In this article we therefore explore social workers' experiences working with child abuse victims in a clinic in Johannesburg, South Africa, by conducting and analysing semi-structured interviews.

Context

Child abuse

Child abuse and neglect, or child maltreatment, includes all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that results in actual or potential harm to the child's health, development or dignity. Within this broad definition, five subtypes can be distinguished; physical abuse, sexual abuse, neglect and negligent treatment, emotional abuse, and exploitation (World Health Organization, 2015). In South Africa, child abuse rates are one of the highest in the world. In the case of sexual abuse and exploitation, reported rates reach between 16.7% and 56% in boys and between 33.9% and 53% in girls (Carey, Walker, Rossouw, Seedat, & Stein, 2007; Jewkes, Dunkle, Nduna, Jama, & Puren, 2010; Madu & Peltzer, 2000, Optimus Study, 2016). Prevalence rates between 15.2% and 20.8% are reported for physical abuse, 16.1% to 26.9% for emotional abuse (Madu, 2003; Optimus Study, 2016), and 12.2% to 15.1% for neglect (Optimus Study, 2016). These figures differ widely, depending on the definitions of child abuse used, the research methods, and the location of the study (Optimus Study, 2016). Sexual abuse of children often occurs within the family or in a

context where the child knows the perpetrator (Collings, 2005; Madu & Peltzer, 2001; Optimus Study, 2016). Sexual abuse may also be committed by professionals who use their position of power and trust to violate children's rights (Sullivan & Beech, 2002), as was illustrated in the vignette.

Many children develop mental disturbances and/or social problems after exposure to abuse. Sexual abuse appears to be one of the strongest predictors for developing posttraumatic stress disorder (PTSD) in South African children, with an estimated 22.2% risk both for boys and girls of developing PTSD following sexual assault (Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004). More recent studies found lower risk, with 6.4% for children exposed to sexual abuse, and 2.2% for children exposed to another form of maltreatment (Optimus Study, 2016).

Different explanations have been provided for the overall high rates of child abuse in South Africa, relating to cultural and societal factors. One explanation is the male-dominated nature of society and a cultural acceptance of harsh physical punishment as means of discipline, even including tolerance for sexual coercion (Andersson et al., 2004; Richter & Dawes, 2008). Another explanation relates to traditional beliefs in the 'cleansing' nature of sex with virgins or young girls, meaning that it may cure diseases like sexually transmitted diseases and HIV and AIDS, or it may bring good fortune in other areas of life (Lalor, 2004). It is also hypothesized that factors such as poverty, large numbers of orphaned children, the rapid social-economic change and the breakdown of traditional values and practises as consequence, and poorly developed child protection services account for the high number of child maltreatment cases (Lachman et al., 2002, Optimus Study, 2016).

Social work

Social workers serve a crucial role in helping children and their families to improve the quality of life and subjective wellbeing after maltreatment. Since 2003, social work has been considered a scarce skill in South Africa by the Minister of Social Development. There are too few social workers, resulting in heavy caseloads. Naidoo and Kasiram (2006) reported that social workers in South Africa are generally in excess of 120 cases, compared to a maximum of 12 in the UK. Employees also value proper salaries and optimal working conditions (i.e. having a clean office, child support, and reliable cars for fieldwork), which most of the times is not possible in rural areas due to a lack of money and resources (Engelbrecht, 2006). These problems contribute to a large number of social workers being unsatisfied with their work and immigrating to other countries, with an estimate of between 200 and 240 per year (Oliphant, 2009). The current knowledge on social workers' perspectives on working and dealing with child abuse in South

Africa is rather small compared to countries in North America and Europe, and thus needs further investigation (Capri, Kruger, & Tomlinson, 2013).

Mental health care in a multicultural context

South Africa is a multicultural society, with eleven official languages and diversity across ethnic, cultural, religious and socio-economic realms. As a result, mental health care approaches in South Africa are diverse, consisting of both the more traditional healing rituals, such as herbalism and witchcraft, as well as western evidence-based therapies such as play therapy and cognitive behaviour therapy (Campbell-Hall et al., 2010). Which approach people prefer, or their health seeking behaviour, is influenced by what people believe is causing mental illness, with the more traditional explanatory models often referring to spiritual causes such as ancestors (Crawford & Lipsedge, 2004; Meissner, 2004). Health seeking behaviour in South Africa was also found to be associated with specific demographic variables such as age, race, and level of education (Sorsdahl et al., 2009). Considering access to the different health care resources, the ratio of traditional health practitioners to the general population is approximately 1:500, compared to that of 1:40 000 ratio for western doctors (Nyanga, 2015). Some mental health patients strongly prefer one approach over the other, but others consult a combination of both Western and alternative practitioners (Sorsdahl et al., 2009).

Research site

The current study was conducted in an urban area in Gauteng in South Africa, at a non-profit trauma clinic. The communities served by the clinic are characterized by high levels of poverty, unemployment, and violence. The clinic deals with any form of child abuse, including sexual abuse, physical abuse, emotional abuse and neglect. The clinic also works together with a hospital, where medical screening is performed when abuse is suspected, and with the local court for persecuting perpetrators of abuse. The social workers are involved in forensic assessments, preparing the children for court as well as counselling interventions with victims and their families, mainly focused on play therapy. Besides intervention, there are prevention programmes focusing on informing children in schools about safety and abuse. Social workers also collaborate with schools, social welfare systems, and the police.

Methods

Participants

Eight social workers working in the trauma clinic in Gauteng, South Africa, participated in this study. All nine social workers in this specific clinic were invited to participate.

One social worker was unavailable at the time of participating and therefore not included. Of the eight participated social workers, gender distribution was two males and six females, and the race distribution was seven black and one coloured. The social workers worked in three different places, both rural and urban, each with a different client population in terms of population group and socio-economic status. The eight social workers were between 26 and 46 years old. Some of them only worked as a social worker for one year, where others were in this profession for seventeen years.

Instrument

The study conducted semi-structured interviews focusing on the experiences of social workers in the field of child trauma in South Africa. First, questions were asked related to general information on their profession, like how long the social workers have been working for the clinic. Furthermore, the social workers were asked for the strategies that the clinic uses in response to child trauma. The interviews in particular also touched on the individual experiences of the social workers dealing with child trauma in the South African context, how they cope personally, as well as their needs to improve the quality of support. Interviews were recorded and transcribed verbatim except for names to ensure confidentiality. The full interview guide is provided in Table 1.

Table 1 Interview guide

Background

(e.g., how long have you been working as a social worker, how would you describe in a few sentences the work you are doing, how likely are you to change jobs within the next two years, why?)

Strategies

(e.g., how do you support the children in your current work, what strategies do you use, which one is most helpful, which one is least effective, why?)

Experiences

(e.g., what are your own experiences in supporting child victims after trauma, can you give me an example what did you do, how did you feel in this situation, how did the child react, what do you like about being a social worker for this clinic, what major disappointments have you had in your work?)

Coping

(e.g., how do you cope with the trauma you deal with every day, where do you get support, what do you think of it, to what extent would you want to have more information than you have now?)

South African context

(e.g., what would you like to see changing in the way South Africa deals with the problem of child trauma, what do you think that is going to change in your field of expertise in the next five years?)

Analysis

Data were analysed using thematic analysis as stipulated by Braun and Clarke (2006) who proposed an outline guide through six phases of analysis. The study's approach was inductive, in which coding was solely data-driven. Analysis started with general reading and re-reading of the transcripts, followed by generating initial codes in a systematic fashion. This process was completed independently by the two coders

(NW and EF). Then the codes were collated into potential themes, and themes were reviewed, refined, and discussed until consensus was reached between two coders. Cohen's Kappa was calculated to determine inter-rater reliability for the first five interviews, and there appeared to be good agreement between the two researchers' judgments, $\kappa = .805$ (95% CI, .697 to .913), $p < .0001$. QSR International's NVivo 10 qualitative data analysis software was used to capture this process. Ethical approval was obtained from the University of Johannesburg, Faculty of Humanities and the clinic. Informed consent was obtained from each participant prior to the interviews outlining voluntary participation, confidentiality, the research procedure and right to refuse or withdraw at any stage.

Results

The duration of the interviews varied between 29 minutes to 1 hour and 12 minutes ($M=45.03$). Based on the thematic analyses, three themes in the narratives were distinguished. The first theme highlighted the struggles of the social workers on a personal level, dealing with traumatic stories on a daily basis and the stressful nature of their work, referring to compassion fatigue. The second theme referred to the struggle of the social workers on a professional level, and included feelings of incompetence and a lack of training specifically focused on the South African context. The third theme highlighted the interactions that social workers have with the community and forensic system, and the cultural barriers that hinder them from doing their work. Below we elaborate on the three themes.

Theme 1: Compassion fatigue

Child abuse is really, really traumatic

A large number ($N=6$) of the interviewed social workers indicated that they were struggling with the traumatic nature of the work and the high case load. They felt the strain of working with trauma on a daily basis and it made them emotionally numb and scared for their own safety. Compassion fatigue (CF) is defined by Figley (2002, p. 7) as the formal caregiver's reduced capacity or interest in being empathic or 'bearing the suffering of clients' and refers to 'the natural consequent behaviours and emotions resulting from knowing about a traumatizing event experienced or suffered by a person'. Apart from the negative experiences, social workers also reported positive experiences from their interactions with clients, for instance when they received positive feedback from the parents, or when they saw that a child was feeling better, which was rewarding in the short term. There were support mechanisms in the work setting for the social

workers, including supervision, case conferences, and an advising psychologist. In the long term, however, the emotional strain and the low salary made more than half of the social workers say that they would soon leave their job. They either did not want to continue in this field in the next two years, or they wanted to study further and specialize in another discipline.

I am at a point in my life where I feel like it's too much. I need a break. I might come back ... But for now I feel like I am not coping.

It was clear that the social workers felt that their work was impacting their personal lives, as well as their role as parents.

You become paranoid as well hey. You are overprotective with everything you do, you watch every little movement of your child and you are so scared that something would happen to them.

The social workers reported that there were not enough clinics to help all the abused children, and not enough health care workers who had the experience dealing with abuse and court. The social workers in this clinic felt victimized because most health care workers, including psychologists and other social workers, from other organisations referred traumatized children to them, increasing their caseload. Children came from all over the country for forensic assessments. Social workers were also concerned that due to a lack of facilities, children could not go to places of safety and therefore had to stay with the perpetrator.

There should be more facilities where a child could attend therapy or counselling. Because I have had children from Limpopo coming here to Joburg, because the police officer is saying, I didn't find any other organization where the child could attend an assessment, or therapy.

Theme 2: Professional development

You get stuck and you don't know where to go

In the interviews all social workers (N=8) indicated a need for continuous professional development. They felt they did not receive enough training to prepare them for this work. More specifically, although they received formal university education, some of them felt incompetent when it came to conducting therapy, but they were engaging in it on a daily basis. They were often unsure how to handle the children in therapy, espe-

cially the very young ones. Nevertheless, the social workers were all very motivated to learn more and they often tried upgrading their own skills by reading research papers or books in their own time. Sometimes they got to attend training, but due to a lack of funding training was limited.

Five social workers commented on the struggle of facilitating disclosure as part of the forensic assessment. The court required them to get the story from the child, and the protocol they used prescribed that in the first session they facilitated this disclosure. Because of the lack of trust among children after trauma, obtaining the required information was a very difficult task. The need to build rapport was of paramount importance, but often there was not enough time. One male social worker also indicated his struggle to connect with female victims of abuse, as he sensed their discomfort, which in turn rendered him insecure in how to handle the conversation.

I am not a play therapist. ... I do observe some kids play, and I see them get violent with toys. I see them looking at certain aspects of certain toys that they are presented with. But I could not say I am so confident I know how to interpret what is happening.

Part of the knowledge gap consisted of a lack of knowledge and practises specifically focused on the South African setting. For instance, techniques that the social workers were taught included the so called 'castle technique' or the 'island technique', techniques derived from Gestalt therapy (Turner & Rowe, 2013). The social workers commented that these techniques could be problematic in South Africa because most children lived in informal settlements and were not familiar with the concepts of castles or islands. There was not even a word in their languages for island, and the social workers were unsure about changing the word because it might impact the validity of the approach.

And the other thing that doesn't seem to work for me, especially with African children, is this imaginative technique like the Castle technique. You find yourself having to explain so much what a castle is, because they don't understand the concept at all. So by you talking about the castle technique, you almost end up telling about what they should think.

This alluded to training that does not consider indigenous knowledge systems or teaching social workers to adapt techniques to cultural specific contexts. Looking back on the initial vignette in this paper, social workers in South Africa were dealing with

special circumstances of rape that are uncommon in the Western world. An example that was mentioned in one of the interviews was the concept of corrective rape. The term corrective rape was described by Isaack as ‘the sexual violence perpetrated for the purpose of supposedly “curing” a person of their real or perceived sexual orientation and/or gender identity’ (as cited in Anguita, 2012, p. 489). The social worker that reported on a case of corrective rape was unsure how to help the victim or where to find information about it.

There was one case that happened in Cape Town over the weekend. This young woman was hand cuffed and eyes were gouged out completely... I am not sure whether other countries outside of South Africa have the same challenges when it comes to corrective rape.

Theme 3: Societal response to trauma

Therapy is maybe for white people

Most interviewed social workers (N=7) indicated challenges working with the community they were serving. For the majority of the parents that visited the clinic, especially from less privileged backgrounds, therapy was a foreign concept, and they did not see the value of their child attending therapy. Although the clinic held separate parent groups in which parents were educated about all available services and therapy benefits, therapy attendance was low. Initially, most parents visited the clinic as part of the court procedures, to press charges against the perpetrator, but thereafter they often lost interest, just when the social worker had built a relationship with the child. The parents also lacked knowledge about their own contributions in the therapeutic process. It often happened that they shifted all the responsibilities to the social workers and expected them to ‘fix their children’. The social workers also mentioned that children became victims of custody cases, when one of the parents (falsely) blamed their partner of sexually abusing the child.

They are starting to use children as tool to fight their own battle, and at the end of the day you are in the middle of everything as a social worker.

Another case reported by one of the social workers illustrated how the parents, after the child had been abused or raped, gave the child away to the perpetrator in exchange for money to marry her. This is an extended form of an African tradition called *Lobola*, which is the provision of gifts to the parents of a bride, usually in the form of cash or livestock, and is an entrenched part of marriage in parts of Southern Africa (Ansell,

2001). In such cases, abuse was also perpetuated by the parents and justified as their right as parents, which stood in direct opposition to the rights of the child. Social workers subsequently had a constant battle between their own values and cultural practices and that of the client and the parents.

I had a client who was a teenager and she was raped by a neighbour. And the parent took Lobola for that child, after the child was raped. So, it is disappointing that a parent that demands money and marry the child away instead of opening a case and following up with what is going to happen.

A final challenge highlighted by the social workers (N=4) referred to the justice system, where cases could take up to years to be concluded. Moreover, the majority of cases were withdrawn due to a lack of evidence. Social workers reported high levels of frustration with the process, and reports of anxiety from the parents and the children. The process of the investigation was perceived as not being child sensitive, and children could get re-traumatized by the interrogation. Perpetrators often did not get convicted, or were on a long bail, and continued to scare and threaten the children. Social workers highlighted that this is an area that directly effects their work experience and the wellbeing of the children, and needs urgent attention and improvement.

The perpetrators are out on bail, that bail became a year, that bail became two years, that bail became three years. How is that possible? Being on bail for three years? And yet, this perpetrator comes and threatens this child.

Discussion

The current study explored social workers' perspectives on working with abused children in South Africa, where child maltreatment rates are extremely high. Through conducting interviews, this study aimed to find out first-hand about the experiences of social workers. Three themes were identified in the narratives, and they can be characterized as individual experiences according to three different themes. The first theme summarized the individual experiences of the social worker working as a professional in the South African context, and was characterized by compassion fatigue. The second theme summarized the organisational and learning challenges as experienced by the social workers, and highlighted the need for professional development. The third theme summarized the experiences at the level of society, referring to the community's

response to trauma and the justice system. The three themes, will be discussed below in light of previous studies as well as future recommendations.

A considerable limitation to this study is that it has been conducted with a very small group of participants within a specific context in and around Johannesburg. However, the study sheds light on challenges in a developing context, and the results could lead to possible steps in order to improve trauma care in developing countries. Moreover, as globalization increases our interactions with foreign cultures and practises, we believe that the implications of our findings are relevant for different settings.

Compassion fatigue

The findings confirmed what previous studies in low- and middle-income countries found: extreme high workloads, in combination with a lack of sufficient supervision and support (Saraceno et al., 2007; Tol et al., 2014). These different factors appear to work together causing pressure on social workers, and potentially effect quality of care, placing social workers at risk for compassion fatigue, and causing high staff turnover. In a follow-up on our study, two years after the interviews, five of the eight social workers interviewed had already left their job. The concept of compassion fatigue has been documented and validated for some time (Adams, Boscarino, & Figley, 2006; Figley & Kleber, 1995), and to prevent further drop out of passionate professionals, interventions must be put in place.

In order to achieve this, it was for instance recommended in previous studies that specialist staff should take on the role of managers and supervisors (Saraceno et al., 2007), to support social workers and build a platform of skilled and confident professionals. Another recommendation is that NGO's should move away from a nonstop 'all hands on deck' approach, in which everyone, from social workers to managers, tries to work through the high caseload and see as many clients as possible. This impacts on the efficiency and effectiveness of interventions, with a lack of time for innovation, identifying problems such as those mentioned above, further training, specialization, and supervision. So called stepped care models could provide a useful framework to divide and regulate the different levels of intervention intensity and required expertise (see for an example of this Fuchs and Fuchs (2006), Fuchs and Vaughn (2012) and Kazak et al., (2006)). For instance, a first level intervention could be dedicated to educating the community at large, a second level including psychological first aid programmes that can be run in larger groups by briefly trained health care workers, and a third level for the individual, specialized treatment for those children for who problems are long-term and more severe.

Professional development

The second theme consisted of findings related to a lack of professional development and further training. It was rather concerning to us that abused children attend therapy with a social worker who says that “I could not say I am so confident I know how to interpret what is happening”. For instance, if an abused child shows repetitive play during the session, and the social worker is unsure how to reconstruct the play into a more conducive action, it may lead to more negative appraisals of the traumatic event and produce more threat and persistent symptoms (Ehlers & Clark, 2000). Although the social workers received formal training at university before facilitating such therapies, it appears this is not a good-enough preparation. Graduated social workers apparently lacked practical skills, knowledge and confidence to change and adapt existing methods. As became clear from the interviews, social workers relied more on techniques rather than sound therapy approaches. More research should be conducted to clarify this disparity between university training and practise in the specific therapeutic context.

Further training for social workers should not only encompass regular supervision, and coping skills to prevent compassion fatigue, but also play therapy skills should be enhanced. Another addition to the training curriculum, specifically in South Africa, is the inclusion of indigenous rituals and knowledge. There is for instance the need for development and validation of alternatives to the ‘castle technique’ that are more appropriate to the South African context. As children play in townships using sticks and stones, natural resources could be introduced in play therapy, instead of foreign toys from the store. Another example is to link traditional games and concepts related to the forefathers with narrative therapy.

Society response to trauma

Findings in this study highlighted once again that child abuse and treatment cannot be viewed as distinct from the socio-cultural context in which it occurs. Within a multicultural society like South Africa, there are many different explanatory models of illness, or belief systems on what causes psychological distress and how it should be treated (Campbell-Hall et al., 2010; Crawford & Lipsedge, 2004; Meissner, 2004; Ross, 2007). This can complicate treatment effectiveness and adherence, if ‘Western’ interventions are implemented without educating the community about its benefits and receiving commitment and buy-in from the community at large. This was for instance reflected by the social workers struggling to get commitment from the parents. Consequently, further training of social workers could emphasize more on building a connection with the parents and educating them about the therapy.

The current study also highlighted that community projects need to be sensitive in encouraging the rights of children while simultaneously acknowledging the relational value of cultural practices. This fits into a community-based approach of mental health care (Tol et al., 2014). The boundaries between cultural practices and children's rights are blurred, as was clear by the case illustrated by the social worker, where Lebola was paid to the perpetrator. Other such intricate practises include early marriages, rites of passage, patriarchy in which men come to see their abusive behaviour towards women and children as their culturally given male rights, and the earlier mentioned alleged belief that sex with a baby or virgin would cure HIV and AIDS (Guma & Henda, 2004; Lalor, 2004; Richter & Dawes, 2004).

Lastly, in South Africa risk for child maltreatment is also inherent in a poorly functioning social and criminal justice system (Ewing, 2003). As was confirmed by the social workers, cases end up delayed or withdrawn for various reasons, and as a result perpetrators are rarely held accountable and children remain vulnerable to further abuse. Challenges working with the justice system were also highlighted in a previous study (Optimus Study, 2016). Although the clinic tries to provide child-friendly services, the court process and collaboration with the different agencies is far from ideal and should receive further improvement.

Epilogue

Several challenges are affecting the effectiveness and practicality of Western evidence-based interventions in the developing context. This article examined three of these challenges experienced by social workers working in a trauma clinic in Johannesburg, South Africa. The first challenge was the high workload and traumatic nature of the work resulting in vulnerability to compassion fatigue. Increased support and restructuring on an organizational level is required to relieve some of the workload and improve quality of care. The second challenge was the urgent need for professional development and further training, referring to more transferable skills, and adaptation of Western methods to different socio-cultural contexts. The third challenge was the collaboration with the community, parents, and the justice system. Education in the community about the benefits of therapy should be of primary importance, as well as emphasizing children's rights within existing cultural practises. Collaboration between social services and the justice system needs improvement. Addressing these topics is a next step in supporting the social workers and other health care workers in their work, ultimately moving towards best-practices for abused children.

References

- Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry*, *76*, 103-108.
- Andersson, N., Ho-Foster, A., Matthis, J., Marokoane, N., Mashiane, V., Mhatre, S., Mitchell, S., Mokoena, T., Monasta, L., Ngxowa, N., Salcedo, M. P., & Sonnekus, H (2004). National cross sectional study of views on sexual violence and risk of HIV infection and AIDS among South African school pupils. *British Medical Journal*, *329*, 952-960.
- Anguita, L. A. A. (2012). Tackling corrective rape in South Africa: the engagement between the LGBT CSOs and the NHRIs (CGE and SAHRC) and its role. *The International Journal of Human Rights*, *16*(3), 489-516.
- Ansell, N. (2001). 'Because it's our culture!' (Re)negotiating the meaning of lobola in Southern African secondary schools. *Journal of Southern African Studies*, *27*(4), 697-716.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.
- Campbell-Hall, V., Petersen, I., Bhana, A., Mjadu, S., Hosegood, V., & Flisher, A. J. (2010). Collaboration between traditional practitioners and primary health care staff in South Africa: Developing a workable partnership for community mental health services. *Transcultural Psychiatry*, *47*(4), 610-628.
- Capri, C., Kruger, L. M., & Tomlinson, M. (2013). Child Sexual Abuse Workers' emotional experiences of working therapeutically in the Western Cape, South Africa. *Child and Adolescent Social Work Journal*, *30*, 365-382.
- Carey, P., Walker, J.L., Rossouw, W., Seedat, S., & Stein, D. (2007). Risk indicators and psychopathology in traumatised children and adolescents with a history of child sexual abuse. *European Child and Adolescent Psychiatry*, *17*(2), 93-98.
- Collings, S. J. (2005). Brief research report sexual abuse of boys in KwaZulu-Natal, South Africa: A hospital-based study. *Journal of Child and Adolescent Mental Health*, *17*(1), 23-25.
- Crawford, T. A., & Lipsedge, M. (2004). Seeking help for psychological distress: The interface of Zulu traditional healing and Western biomedicine. *Mental Health, Religion & Culture*, *7*(2), 131-148.
- Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(4), 319-345.
- Engelbrecht, L. (2006). Plumbing the brain drain of South African social workers migrating to the UK: challenges for social service professions. *Social Work/Maatskaplike Werk*, *42*(2), 127-146.
- Ewing D. 2003. *Stolen Childhood: Rape and the Justice System*. Children First: Durban.
- Figley, C. R. (2002). *Treating Compassion Fatigue*. New York, NY: Brunner-Routledge.
- Figley, C. R. & Kleber, R. J. (1995). Beyond the 'victim': Secondary traumatic stress. In R. J. Kleber, C. R. Figley, & B. P. R. Gersons (Eds.), *Beyond trauma: Cultural and societal dimensions* (pp. 75-98). New York, NY: Plenum.
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *New Directions in Research*, *41*(1), 93-99.

- Fuchs, L. S., & Vaughn, S. (2012). Responsiveness-to-Intervention: A decade later. *Journal of Learning Disabilities, 45*(3), 195-203.
- Guma, M., & Henda, N. (2004). *The socio-cultural context of child abuse: a betrayal of trust*. In L. Richter, A. Dawes & C. Higson-Smith, Sexual abuse of young children in southern Africa. (pp. 95-109). Cape Town, South Africa: HSRC.
- Jewkes, R., Dunkle, K., Nduna, M., Jama, P.N., & Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect, 34*, 833-841.
- Kazak, A. E., Kassam-Adams, N., Schneider, S., Zelikovsky, N., Alderfer, M. A., & Rourke, M. (2006). An integrative model of pediatric medical traumatic stress. *Journal of Pediatric Psychology, 31*(4), 343-355.
- Lachman, P., Poblete, X., Ebigbo, P., Nyandiya-Bundy, S., Bundy, R., Killian, B., & Doek, J. (2002). Challenges facing child protection. *Child Abuse & Neglect, 26*, 587-617.
- Lalor, K. (2004). Child sexual abuse in sub-Saharan Africa: A literature review. *Child Abuse & Neglect, 28*, 439-460.
- Madu, S. N., & Peltzer, K. (2000). Risk factors and child sexual abuse among secondary school students in the Northern Province (South Africa). *Child Abuse & Neglect, 24*(2), 259-268.
- Madu, S. N., & Peltzer, K. (2001). Prevalence and patterns of child sexual abuse and victim perpetrator relationship among secondary school students in the Northern Province (South Africa). *Archives of Sexual Behaviour, 30*(3), 311-321.
- Madu, S. N. (2003). The relationship between parental physical availability and child sexual, physical and emotional abuse: A study among a sample of university students in South Africa. *Scandinavian Journal of Psychology, 44*, 311-318.
- Meissner, O. (2004). The traditional healer as part of the primary health care team? *South African Medical Journal, 94*, 901-902.
- Naidoo, S. & Kasiram, M. (2006) 'Social work in South Africa: Quo Vadis?' *SocialWork/ Maatskaplike Werk, 39*(4), 372-380.
- Nyanga. (2015). Traditional healing and law. Retrieved from http://www.traditionalhealth.org.za/t/traditional_healing_and_law.html
- Oliphant, L. (2009). *Social work top priority*. The City Press, 22 March 2009:12.
- Optimus Study (2016). *Sexual victimisation of children in South Africa Final report of the Optimus Foundation Study: South Africa*. Zurich, Switzerland: UBS Optimus Foundation.
- QSR International. (2012). NVivo 10 [Computer software]. Available from <http://www.qsrinternational.com>
- Richter, L., & Dawes, A. (2004). *Confronting the problem*. In L. Richter, A. Dawes & C. Higson-Smith, Sexual abuse of young children in southern Africa. (pp. 1-18). Cape Town, South Africa: HSRC.
- Richter, L. M., & Dawes, A. R. L. (2008). Child abuse in South Africa: Rights and wrongs. *Child Abuse Review, 17*, 79-93.
- Ross, E. (2007). Traditional healing in South Africa: Ethical implications for Social Work. *Social Work in Health Care, 46*(2), 15-33.

- Saraceno, B., van Ommeren, M., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., ... Underhill, C. (2007). Barriers to improvement of mental health services in low income and middle-income countries. *The Lancet*, *370*(9593), 1164-1174.
- Seedat, S., Nyamai, C., Njenga, F., Vythillingum, B., & Stein, D. J. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools: Survey in Cape Town and Nairobi. *The British Journal of Psychiatry*, *184*, 169-175.
- Sorsdahl, K., Stein, D. J., Grimsrud, A., Seedat, S., Flisher, A. J., Williams, D., & Myer, L. (2009). Traditional healers in the treatment of common mental disorders in South Africa. *The Journal of Nervous and Mental Disease*, *197*(6), 434-441.
- Sullivan, J., & Beech, A. (2002). Professional perpetrators: Sex offenders who use their employment to target and sexually abuse the children with whom they work. *Child Abuse Review*, *11*, 153-167.
- Tol, W. A., Barbui, C., Bisson, J., Cohen, J., Hijazi, Z., Jones, L., ... van Ommeren, M. (2014). World Health Organization guidelines for management of acute stress, PTSD, and bereavement: Key challenges on the road ahead. *PLoS Medicine*, *11*(12), e1001769.
- Turner, F. J., & Rowe, W. (2013). *Social work clinical techniques*. New York, NY: Oxford University Press.
- World Health Organization (2015). Child maltreatment. Retrieved from: http://www.who.int/topics/child_abuse/en/



4

The experiences of professional hospice workers attending creative arts workshops in Gauteng

Nadine van Westrhenen
Elzette Fritz

Health Education Journal 2012; 72(1), 34-46
[doi:10.1177/0017896911430545](https://doi.org/10.1177/0017896911430545)

Acknowledgment of author contributions:
Research design: N van Westrhenen & E Fritz,
Data collection: N van Westrhenen,
Data analysis: N van Westrhenen & E Fritz,
Paper writing: N van Westrhenen & E Fritz

Abstract

Object: This article explores the experiences of professional hospice workers using a creative process for debriefing them in order to facilitate the expression and communication of complex thoughts and feelings. The creative arts workshops were developed with the understanding in mind that caring for terminally ill patients can be challenging and stressful and professional hospice workers are subsequently at risk of developing compassion fatigue. The workshops focussed on skills transfers as well as self-healing by experiencing and teaching a diverse range of creative arts like music, drama, art, touch therapy, storytelling and movement.

Design: Case study design.

Setting: Gauteng, South Africa.

Methods: Data collection included individual interviews with 19 trainees at nine different hospices, focus group interviews, observations during the workshops as well as a researcher journal. Themes were generated through thematic analysis to describe the experiences of the caregivers.

Results: We found that the expressive arts facilitated communication and self-care and improved the wellbeing of the professional hospice workers.

Conclusion: These findings add to understanding of the healing effects of the creative arts and especially the benefits in the hospice setting.

Keywords: creative arts therapy, debriefing, palliative care, South Africa

Introduction

Behind us all is one spirit and one life. How then can we be happy if our neighbour is not also happy? (Khan, 1979, p.123)

Care giving to terminally ill people can be emotionally powerful and gratifying at a personal level, but it is also viewed as exhausting, stressful and emotionally demanding (Smit, 2005). Caregivers are repeatedly confronted with their patients' suffering, the unpredictability of death, repeated losses and grieving. 'How can we be happy if our neighbour is not also happy' (Khan, 1979, p.123) is a saying that relates to the concept of Ubuntu (Swanson, 2007), which in the South African context alludes to the individual's wellbeing associated with the wellbeing of others. Considering the South African context in which caregivers work, it is understandable that they are influenced by the sadness and suffering of the patients in a hospice environment. Not only do the caregivers provide care to their patients, but they also need to deal with their own challenges and psychosocial needs. As such, caregivers require the same interventions they provide to those in their care, especially considering that caregivers might also be affected by human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) within the context of their own families and communities.

There is an extensive body of literature about the risk of burnout caregivers in hospices are exposed to (Medland, Howard-Ruben, Whitaker, 2004; Mukherjee, Beresford, Glaser, & Sloper, 2009), but less has been written about how to solve this problem. Therefore interventions are required that can provide, on the one hand, support to the caregivers so that they are able to deal with the stress associated with their occupations, as well as deal with their own problems and traumas. On the other hand, the interventions need to be relevant and applicable to their care giving duties so that they in turn can support those in their care using the interventions they have been exposed to. These interventions, especially in the South African context, need to consider the cultural diversity and practices and as such the implementation of Western approaches to psychology should be considered critically (Bandawe, 2005). The practice of psychology is still regarded with suspicion in the African context due to the legacy of apartheid, which has meant that psychological practices were perceived to have been used in aid of oppression and segregation (Duncan, van Niekerk, De La Rey, & Seedat, 2001). As such, more culturally-appropriate interventions are required that acknowledge cultural beliefs and practices and are more affordable. At the moment, financial and physical resources are inadequate to provide support where needed and, in most cases, resources are applied to address the physical needs of those deemed vulnerable, especially in the context of HIV and AIDS. Very little attention is paid to the emotional

and psychological needs of both caregivers and those infected by HIV and AIDS. Therefore, there is a need for interventions in the larger system that addresses the needs of caregivers and those in their care with prevention rather than remediation becoming a priority. Community psychology is a good alternative to traditional individual therapy in the South African context. Further, it would be very limiting to provide help without using culturally-appropriate methods that utilize indigenous knowledge systems. The use of creative arts therapies has proven to be cross- culturally effective (Aldridge, 1993; Harris, 2007), overcoming language boundaries and facilitating the expression of emotions that are difficult to put into words.

This article therefore reports on the experiences of caregivers participating in art therapy. A total of 11 creative arts therapy workshops were implemented for 19 caregivers working in nine different hospices in South Africa. The aim of the workshops was to facilitate self-healing as well as develop skills which they in turn could transfer into their respective communities. In this way a greater group could be reached and helped, thus saving time and costs which subsequently could be a key to successful psychological support in the context of South Africa. The question that guided the research and which this article reports on was ‘What are the experiences of professional hospice workers attending creative arts therapy workshops?’.

In order to contextualize the article, first an overview of important literature will be provided concerning care giving, stressors that are related to the job and the use of creative arts therapy in previous studies. Second, the article will focus on the specific programme that was implemented during the workshops and the experiences thereof by the caregivers. These experiences were captured by means of interviews, observations and field notes recorded in the researcher’s journal. Then themes that emerged during data analysis will be discussed and conclusions and recommendations subsequently presented.

Hospice–palliative care service in South Africa

In South Africa, hospice services are widespread, focussing on diverse communities (including orphans and the homeless) and offered in diverse settings (including inpatient, day care and home care). Between 2003 and 2004, data showed that 24,613 patients were cared for, of whom 12,413 had an AIDS diagnosis whereas 9,233 had cancer (Wright, Wood, Lynch, & Clark, 2008). To cope with the demand for home-based caregivers as a result of the rising number of people infected with HIV in South Africa, the government promotes volunteerism (Dinat, Ross, & Ngubeni, 2005). Whereas, typically, hospice workers have nursing training and qualifications, the caregivers in the context of HIV and AIDS have often limited training and even less support.

Hospice care giving and compassion fatigue

Overall it appears that nurses working in hospices get very little support, at both professional as well as personal levels, and this lack of support has a great impact on the nurses (Abendroth & Flannery, 2006). This may lead to a decreased physical, social and psychological wellbeing (De Chavez, Backet-Milburn, Parry, & Platt, 2005). The caregivers are at risk of job burnout, depression and traumatic stress disorders which the country cannot afford seeing that there is such a high need for staff in hospices. Compassion fatigue is very common among hospital nurses. A study by Abendroth and Flannery (2006) showed that nurses who are working in a hospice environment are especially vulnerable to the risk of compassion fatigue.

In this research, nearly 80% (n = 170) of the total sample (N = 216) was in the moderate-to high-risk category for compassion fatigue. Compassion fatigue (CF) is defined by Figley (2002) as the formal caregiver's reduced capacity or interest in being empathic or 'bearing the suffering of clients' and is 'the natural consequent behaviours and emotions resulting from knowing about a traumatizing event experienced or suffered by a person' (p.7). Figley argues that CF consists of two separate features, both secondary traumatic stress and job burnout (Figley, 2002). Secondary traumatic stress is defined as re-experiencing of the client's traumatic event, wishing to avoid both the client and reminders of the client's trauma, and feeling persistent arousal due to intimate knowledge about the client's traumatic experiences. In the South African context people are at great risk of being exposed to traumatic events and the lack of proper resources in the job places a great amount of pressure on the caregivers. Both features of CF as presented by Figley (2002) are likely to occur in this context and therefore a supportive programme for the caregivers is needed.

The importance of supporting hospice staff

Because of the great risk hospice staff face of developing compassion fatigue and the lack of support, it is very important to develop a programme to support the staff. Medland, Howard-Ruben and Whitaker (2004) suggest that a programme which assists oncology nurses in dealing with bereavement, assists their work in a supportive manner and exposes them to new coping strategies would be beneficial, since it would enhance psychosocial support and provide greater access to counselling services when needed. In a literature overview (Brugge & Higginson, 2006) it was stated that, in palliative care, because of the variety of settings that may exist around the patient, education for the caregivers would be constantly needed. It was found that the best way to educate adults is based on a multi-faceted, personally tailored and culturally-adjusted educational approach. Social support groups, personal awareness, and relaxation techniques have also shown to decrease caregivers' burnout (Richman &

Rosenfeld, 1987). Active engagement in recreational music making is associated with individual and group benefits, since it affords creative expression that unites the body, mind and spirit (Bittman, Bruhn, Stevens, Westengard, & Umbach, 2003).

The healing effects of creative arts therapy

Creative art therapy is based on the idea that the creative process of art making is healing and life enhancing and is a form of non-verbal communication of thoughts and feelings (American Art Therapy Association, 1996). The sensory and image-based communications may be beneficial for clients for whom verbal language is difficult and especially for those who have experienced trauma (Johnson, 1987). Freud (1916-1917) already observed that the most meaningful memories were visual images and that unconscious material can become conscious through projective drawing techniques. Carl Jung (1934) proposed that art can be used to alleviate or contain feelings of trauma, fear, or anxiety and also repair, restore and heal. More recently, research has discovered that traumatic memories are not narratively organized but stored as somatic sensations, emotional vulnerabilities, flashbacks and nightmares, dissociative inclinations and behavioural re-enactments, which result in traumatized people being unable to put their memories into words (Van der Kolk & Van der Hart, 1991). Stuckey and Nobel (2010) made an overview of existing literature on all forms of creative therapy, their healing effects and the benefits for health. They argued that music especially has a soothing capacity to take away anxiety and reduce stress. Visual arts help to integrate life stories and express feelings, thereby facilitating verbal communication. Movement-based creative expression expands consciousness and self-awareness. Lastly, through expressive writing, feelings can be identified and expressed within the safe place of fantasy.

Harris (2007) says dance/movement therapy is particularly well-suited for overcoming cultural differences while helping traumatized adolescents ‘gain the skills they need both for grounding themselves “in their bodies” and for comprehending the relationship between bodily sensation and traumatic memory’ (p.137). In the African context, dance and movement is often included in cultural practices and rituals (Warren, 1970). Hilliard (2006) evaluated the effects of two different types of music therapy on compassion fatigue and team building of professional hospice caregivers. One type was called ecological therapy and consisted of an open format using improvisation; the second type was called didactic therapy and was based on a great deal of structure and skill transfer. Results showed that participants of both groups significantly improved their perceptions of team building and that participants in the didactic therapy group made significantly more improvements in team building than did the ecological therapy group, which showed the importance of a leadership figure in order to improve the

team building in the most optimal way. This study, however, showed no significant changes in compassion fatigue after the music therapy.

Murant and Amonite (2000) used writing, art and music in their programme to reduce stress amongst hospice caregivers in North America. The writing served as a safe place for emotion expression, creating and exploring. It made the participants realize that everyone had an individual point of view and it made them more comfortable to express themselves in their own way. The artwork caused some participants to express their repressed experiences and emotions, which assisted in establishing or maintaining a sense of balance and personal wellness. Art facilitated communication and self-awareness and therefore served as self-care. Music sessions provided expression of emotions and the group sessions served as a symbolic accommodation and integration of group needs versus individual needs. At the final evaluation it appeared that no modality stood out from the others as being more useful. Two years later during a telephone survey most participants agreed that they had gained insight into the need to take care of themselves as caregivers and were better able to do so after attending to the workshop. Based on these findings, the use of creative arts therapy for hospice caregivers was expected to be efficient. Adding to research by Murant and Amonite (2000) in North America, this article focusses on a creative programme that is more likely to be suitable for the South African context, assessing what is intrinsic to a variety of African cultures referring to music, song, rhythm and dance (Warren, 1970). Moreover, it also adds to the research of Hilliard (2006) and Harris (2007) in making use of different types of creative therapy, including massage and drama. The programme will be discussed further below.

Training the trainers

This research explored the experiences of caregivers attending creative arts therapy workshops, facilitated by Dedel'ingoma, which means 'release your song'. Dedel'ingoma, situated in Gauteng, is a non-profit organization established in 2000 to address the increasing levels of emotional and psychological trauma in South Africa experienced by victims of trauma, trauma practitioners and caregivers. Creative art therapy workshops are facilitated by trained psychologists and are aimed at home care workers, prisons, hospices, women, nurses, youth and teachers, wherein the focus is on self-healing as well as developing skills, which they in turn can transfer into their communities. This principle of training a group of caregivers to acquire certain skills, which they in turn pass on to their colleagues, can be called 'training the trainers'. There were nine non-governmental organisations (NGOs) involved in building a local capacity of skilled trainers in creative arts. Capacity building was therefore a main objective

of the workshops. This was deemed appropriate to the South African context as it is important to develop programmes for the community instead of practising individual psychological support.

Additionally, a need for training the caregivers in complementary therapy, such as creative arts, relaxation and massage to support their patients was suggested and thought to be relevant in research by Walton and Latham (Walton & Latham, 2005). For each NGO a couple of trainees were selected based on criteria such as management ability and work experience. They were brought together to attend 11 workshop days in total, divided into four two-day and one three-day workshop. The research group consisted of 19 trainees and included 16 females aged between 21 and 52 years ($M = 33.9$, $SD = 10.6$) and three males aged between 21 and 25 years ($M = 23$, $SD = 2$). The 19 trainees had different functions in the organization, as shown in Table 1. They all worked with patients who are vulnerable, varying from orphans to terminally ill AIDS or tuberculosis patients.

Evaluating the experiences

Data were gathered individually and in groups. The first individual contact between the participants and the researcher took place before the workshop series had started, with the focus on gathering information about the personal as well as professional lives of the caregivers, to get a better understanding of their contexts. These meetings took place in an office near the participants' homes and lasted about 45 minutes each. During the meetings there was an interpreter available, which allowed the participants to express themselves in their mother tongue and overcome any language barriers. However, all participants chose to talk and write in English or Afrikaans, which worked well for the participants as well as the researcher.

Table 1 Function in work in the research group

Function in work	Number (%)
Caregiver	11 (57.9%)
Social auxiliary worker	4 (21.0%)
Coordinator	2 (10.5%)
School programme Facilitator	1 (5.3%)
Nurse	1 (5.3%)

The meeting started with an explanation of the procedure and the principle of informed consent. Then a short semi-structured interview was held wherein they were asked, for instance, about basic demographics and asked to tell something about the work they

were doing. Third, the participants were presented with soulcards (Koff-Chapin) – a card deck with evocative watercolour paintings that invite a response. The cards do not have an established meaning: it is up to the individual's intuition to decipher the images. They were put upside down into a circle on the table in front of the participants and they were asked to pick one soulcard randomly out of the circle and describe the picture and the feelings and thoughts the card evoked. This was done in order to ascertain their current state of wellbeing before the workshop commenced. Lastly, a three minute free writing session followed, wherein the participants were asked to write down their feelings and thoughts that were in their minds at that moment. After three minutes they circled a couple of words that stood out for them. They were then asked to cut these words out of the paper, arranging them in order of importance, pasting the words on a blank piece of paper and subsequently developing a poem out of the words.

The whole process was recorded with permission of the participants and, together with the observations of the creative process and construction of the poem, this formed the data of the first set of individual measurements. The second set of individual measurements consisted of evaluation forms that were handed out after every workshop day on which they could give feedback about the programme and point out what was useful and enjoyable and what was not. On the forms space was provided for any further comments or feedback they would like to give.

Group interviews were held during the workshops after every activity. Participants were asked about their experiences regarding the workshops. Ground rules were set for these discussions, asking participants to maintain confidentiality both within and after the group participation, to listen to others and demonstrate mutual respect for each other. Documentation of verbatim comments and quotations were captured through detailed notes. Once all individual and group data were gathered, a thematic analysis provided a summary of the key issues and themes.

Theme 1: Creativity: 'Everybody is creative, including me'

One caregiver said after making a painting about happiness: 'everybody is creative, including me'. She never realized before that she was creative and did not expect to enjoy it so much. The workshops made her realize that everyone is capable of being creative, a theme that was reiterated by numerous other participants. The activities that took place varied from painting, drawing, music making to dancing and drama. The caregivers mentioned that they had learned how to use creativity to express feelings and thoughts. They did not realize beforehand that they were this creative and they found it relieving to express themselves through creative means. This illustrated

a shift from the He-paradigm to the I-paradigm as mentioned by Glăveanu (2010). The He-paradigm illustrates that the person who is creative is a solitary genius, that such people are deemed extremely rare and seem to possess exceptional capacities. The I-paradigm on the contrary illustrates the belief that every person has a creative potential that can be developed and is not purely innate; creativity is specific to everyday life and not 'reserved' exclusively for artists or scientist. By acknowledging their own creativity, the participants seemed to embrace an I-paradigm. Beforehand, most participants did not realize they could be creative: they thought this was only for the 'solitary genius'. Examples of feedback after the workshops were as follows:

I saw in my painting that my happiness involves so many things around me.

When I came here I was not creative, now I made a nice design.

I now know I can be creative, before I was not given this opportunity.

According to Bilton (2007) creativity is embedded in a cultural context. Creativity can therefore be understood with the 'we-paradigm' wherein the creative impulse is understood in relation to others (Glăveanu, 2010). This also relates to Ubuntu (Swanson, 2007), where the 'I' of the individual is founded in the 'we' of the community. When creativity is observed in groups, the group's dynamics, which can influence the group's creativity, may be closely connected to the group's culture. Creative expression in everyday life can then be understood as it unfolds in social/community contexts in which symbolic or cultural resources are used to generate new processes and artefacts. This community aspect of creativity and the pleasure of working in a group was also mentioned in the feedback of the participants.

I never thought to listen to music without words, this is not about you alone but the whole community.

You learn to communicate and listen to each other by making music together.

They noticed that creativity is not about you alone, but about the whole community. It was therefore evident that indigenous knowledge contributes towards unique creative expression, utilizing material familiar to the cultural practices and the community criteria for evaluating creativity. Overall, the workshops made the participants acknowledge their individual and collective creativity and the benefits they hold.

Theme 2: Self-care: 'They taught me how to be happy again'

One of the benefits of using creativity is that it allows an individual to express thoughts and feelings. Stuckey and Nobel (2010) in a study on exploring the relationship between engagement with creative arts and health outcomes, mentioned the soothing capacity of music in taking away anxiety and reducing stress. Murant and Amonite (2000) also referred to art in facilitating communication and self-awareness amongst hospice caregivers and therefore serving as self-care. In line with such research the caregivers in this study realized that they could release stress and take better care of themselves through creative engagement.

This was an emotional exercise, stress relieving, just good.

Taking care of yourself was something this group was not used to. From the data it was evident that the caregivers were primarily engaged with their patients to the extent that they neglected their own needs. They did not have a good sense of their self, which resulted in being unable to reflect upon themselves. For instance, when asked about their strengths or characteristics, they talked about their patients and their work. One participant who responded to the question 'what are your strengths?' said 'I promote health in the community, I help people to take care of themselves. I sacrifice myself for others'. During the workshops they started to realize they needed time to enjoy themselves and release stress. Already on the second workshop day the feedback was as follows:

All the time in our job it is about other people, now it is about us, this is very useful.

Now I know I sometimes can be selfish. I always used to overcompensate, just give and not take. Now I know, I need to take care of myself.

Theme 3: Boundaries: 'My weakness is my inability to say no'

Through the workshops, the caregivers identified the challenges they experienced with setting boundaries, both in their professional as well as personal lives. They felt the need to constantly share and give to others, urged by a great sense of responsibility for their patients and subsequently finding it very difficult to say no.

I told the patient I would give them my own money because her brother was drinking the money of the house.

It is hard to place boundaries on what we do because of what people expect from us.

We feel guilty and responsible for people in the community who rely on us, so it's hard to say no.

It's not easy to say no to the person because when we refer to other services they do not care and do not look after the person properly, so we must do it.

The feeling of wanting to share and give to others seems to relate to the culture of Ubuntu (Swanson, 2007): 'I am what I am because of who we all are'. Typical to this saying, the caregivers seemed to relate their full identity to the social structures of their communities and that is why 'the other' is regarded as so important. The care workers, however, indicated the experience of stress in their jobs because they were inclined to take on too much responsibility. The consequence from not knowing and acknowledging personal boundaries is neglect of the individual's needs. Due to the altruistic characteristics of this group of caregivers, they were inclined to often put their own needs last. They seemed to find it difficult to separate themselves from others so, if their patients were emotionally distraught, it had a direct influence on the emotional experiences of the caregivers and their work performance.

A couple of the workshop exercises were aimed at establishing boundaries; for example, the participants had to stand in couples facing each other. They joined hands and started to move backwards, putting pressure on each other until the point of falling over. This illustrated what happens when you get too involved in the lives of others and we don't have clear boundaries. They needed to experience the point where they did not feel grounded anymore and therefore needed to stop in order to re-evaluate. The participants seemed to value the understanding that they would be unable to serve those in their care if they as caregivers succumbed to the pressure of illness, disease and despair. As such, a lot of participants valued the lessons and tools relating to how to set boundaries.

Theme 4: Massage: 'When massaging my foot I felt it in my back!'

Massage was by far the most popular activity during the creative arts therapy workshops. The participants explained why they thought it was so effective by referring to the experiences of relaxation this type of touch provided. This activity taught them to provide others with the opportunity to return the favour of taking care and nurturing. They reflected on the affordable value of this way to relax, providing them with the possibilities of using massage at home and in their work environments. Reactions from the participants towards this activity were as follows:

It relieves stress, depression in a cheap, affordably way.

At home I am going to do this as well, trying to relax.

First I was a bit nervous about touching the others, but during time it became more relaxing.

The massages were amazing, very relaxing.

As the participants mentioned, it was a very relaxing activity and had a direct effect on their bodies and emotions. It facilitated a trance-like relaxing experience and helped them escape from reality in a short space of time. In a previous study with hospital nurses and physician staff members massage therapy, relaxation therapy and music therapy were provided. These therapies were found to significantly reduce anxiety, depression and fatigue and it increased vigour (Field, Quintino, Henteleff, Wells-Keiffe, & Delvecchio-Feinberg, 1997).

Recently a study reported on the effects massage has on peoples' bodies that do not suffer from any ailments as such (Rapaport, Schettler, & Bresee, 2009). This study showed that Swedish massage boosts immune cells and leads to other endocrine changes that could reduce the risk of disease. After the massage there were higher levels of white blood cells that fight disease. Cortisol levels that are released in response to stress were lower, in addition to the hormone Arginine Vasopressin (AVP) which is linked to aggressive behaviour. Thus, besides its 'feels-good' factor, there is now a measurable effect of a single massage. It is as the participants in this research pointed out: massage is effective and can be included most successfully in the creative arts therapy workshops. It is relevant for the caregivers in their engagement with patients and can also be passed on to colleagues in an affordable way.

Theme 5: Group support: 'I learned I am not alone'

During the 11 workshop days the group of caregivers developed relational ties with each other and became one supportive network. They managed to create a safe place where they felt free to talk about their problems and express themselves, without being afraid of getting judged by others. Observations of the group showed that, on the first day, the circle of chairs was big with a lot of space in between the chairs; on the sixth workshop day the participants were all sitting shoulder to shoulder. Group support is especially relevant when working with traumatized individuals (Foy, Eriksson, & Trice, 2001). Very often there is a disruption in interpersonal trust following a traumatic event. Bonding with similar others in a supportive environment can be a critical step toward regaining trust. Participants provided the following feedback on the supportive group structure:

*It's nice to share weaknesses.
I love the support and the love we have for each other.
Nobody is perfect, everybody is trying and at the end of the day we are there.*

Besides telling their stories and bonding with the group, they also enjoyed listening to the stories of others. It made them realize they are not the only ones with traumatic experiences. The stories of the others were inspirational for them and provided different ideas on how to address challenges.

*We have all different backgrounds and we can work together to move on.
I realized a lot of people went through even worse things than me; it is motivating to hear them talk about it.
We created an environment where I can find trust, to tell my stories and I know the others can try to help me and keep everything confidentially.*

This theme was especially relevant as there is a misconception in the South African context that there is unity among African people, possibly due to the sense of Ubuntu. The reality, however, is that the African population in South Africa consists of many different cultural groups with different languages, belief systems and cultural practices. These differences often result in segregation (Segabutle, 2010). Group support is therefore important as it builds towards unity and restoring interpersonal trust.

Theme 6: Trauma: 'It took a lot of courage to get where I am today'

In the creative arts therapy workshops the main focus was on debriefing. All participants had their own life stories and most of them experienced traumatic events. The last theme related to trauma. The participants had been dealing with traumatic events for a long time, which most of them said they had never told anyone else before. On a personal level, most of them disclosed having been exposed to violence, either through direct personal experience or exposure through witnessing. Sexual violence, abuse and crime were also part of the stories they told. Grief was a common topic, along with loneliness and poverty. On a professional level, the participants found it sometimes emotionally difficult to deal with unmotivated patients and the regular loss of patients to death. The lack of resources in their work and diffuse boundaries made their work challenging. During the workshops the participants opened up, using creative arts to express themselves. It took a while for them to open up, but by making a painting of their lives and using symbols for events that happened in their pasts, they could face their traumas in a non-threatening manner.

Although some memories were accompanied by discomfort and grief, the participants mentioned that afterwards they experienced a sense of relief and a degree of freedom. Some comments pertaining to this were as follows:

It was not easy to do this exercise because it reminds you of a lot of things in the past. It makes me angry.

You forget about the difficult things in life automatically when enjoying the workshop. That is good.

I think now I had to go through this to smile, I got over and moved on.

Gregerson (2007) wrote about the importance of using creative techniques for trauma prevention and recovery. She uses her own experience after a hometown disaster to describe the benefits of creativity and mentions that 'creativity let me thrive' and 'creativity may be the key to reaching deeply'. This is consistent with the feedback from the participants. To overcome trauma, creativity seems to be a means by which to express emotions within a contained space.

Discussion

This article focussed on the experiences of hospice caregivers attending creative arts therapy workshops in South Africa. Previous research has shown the benefits of creative arts in different settings, but what makes this research relevant is the unique application of creative expressive art therapy using indigenous knowledge in a community context. Making use of indigenous knowledge systems in the programme contributed to unique creative expressions. Creative activities such as music making and using arts which are close to the cultural practice already familiar to the caregivers facilitated the release of stress. Through these activities the participants also came to value their own creative skills, which they previously doubted.

Massage stood out as a significant activity as it was valued as an affordable way to relax and an opportunity to return the favour of taking care and nurturing. Through the workshops the caregivers came to value the importance of looking after themselves by acknowledging personal boundaries, realizing that they could only practice Ubuntu by taking care of themselves first. This was most relevant considering the fact that these caregivers were initially hesitant to acknowledge their own needs for care based on the assumption that they as caregivers were not in the position to require care themselves. They therefore held the perception that self-care was a selfish act and not a pre-requisite for providing care to others.

In combination with experiencing their creative abilities as a way to express their (traumatic) emotions, they also started to appreciate their own resilience, which could prevent them from experiencing burnout. This in essence therefore added to an enhanced self-esteem as they acknowledged their own, at times very challenging, journeys and what actually enabled them to persevere. Concerning the high rate of trauma in South Africa, creativity seems to be a means to express emotions within a safe and contained space. Such space was provided in a supportive group environment to regain interpersonal trust and bring unity, which should be provided through Ubuntu practices, but unfortunately often appears to be just a misconception.

A limitation of this article is that no attention was paid to the sustainability of the programme and how the caregivers applied what they had learnt in turn to those in their care. This process, however, will be monitored later on through further research. It was not the aim of the article to explore this.

Conclusion

Based on the data generated through individual interviews, focus group discussions, observations and supported by a researcher journal with 19 trainees at nine different hospices, this article set out to explore the experiences of professional hospice workers using creative expressive art therapy in a community context. Additionally, the article considered potential skills transfer and self-healing considering compassion fatigue by exposing the participants to a diverse range of creative arts. The results indicate that music and movement resonated with the participants due to their indigenous knowledge systems where music and movement form part of their traditional rituals. Music and dance as part of creative expressive art therapy can therefore provide the opportunity for debriefing without engaging the caregivers in interrogating traumatic events. The massaging activities highlighted the importance of self care and connecting with others in order to optimally serve those in the care of the participants. These findings confirm the potential of community creative expressive art therapy in terms of providing support to caregivers in contexts confronted with scarce supportive resources, such as hospice settings.

References

- Abendroth, M., & Flannery, J. (2006). Predicting the risk of compassion fatigue: A study of hospice nurses. *Journal of Hospice and Palliative Nursing, 8*, 346–356.
- Aldridge, D. (1993). Music therapy research 1: A review of the medical research literature within a general context of music therapy research. *The Arts in Psychotherapy, 20*, 11–35.
- American Art Therapy Association (1996). *Mission Statement*. Mundelein, IL: Author.
- Bandawe, C.R. (2005). Psychology brewed in an African pot: Indigenous philosophies and the quest for relevance. *Higher Education Policy, 18*, 289–300.
- Bilton, C. (2007). *Management and Creativity: From Creative Industries to Creative Management*. Malden, MA: Blackwell.
- Bittman, B., Bruhn, K. T., Stevens, C. K., Westengard, J., & Umbach, P. (2003). Recreational music making: A cost-effective group interdisciplinary strategy for reducing burnout and improving mood states in long-term care workers – insights and potential economic impact. *Advances in Mind-Body Medicine, 19*, 4–13.
- Bugge, E., & Higginson, I. J. (2006). Palliative care and the need for education – Do we know what makes a difference? A limited systematic review. *Health Education Journal, 65*, 101–125.
- De Chavez, A. C., Backett-Milburn, K., Parry, O., & Platt, S. (2005). Understanding and researching wellbeing: Its usage in different disciplines and potential for health research and health promotion. *Health Education Journal, 64*, 70–87.
- Dinat, N., Ross, L., & Ngubeni, V. (2005). The Soweto care givers network: Facilitating community participation in palliative care in South Africa. *Indian Journal of Palliative Care, 11*, 29–33.
- Duncan, N., Van Niekerk, A., De la Rey, C., Seedat, M. (2001). *Race, Racism, Knowledge Production and Psychology in South Africa*. Cape Town, South Africa: Nova Science Publisher.
- Field, T., Quintino, O., Henteleff, T., Wells-Keiffe, L., & Delvecchio-Feinberg, G. (1997). Job stress reduction therapies. *Alternative Therapies in Health and Medicine, 3*, 54–56.
- Figley, C. R. (2002). *Treating Compassion Fatigue*. New York, NY: Brunner-Routledge.
- Foy, D. W., Eriksson, C. B., & Trice, G. A. (2001). Introduction to group interventions for trauma survivors. *Group Dynamics: Theory, Research, and Practice, 5*, 246–251.
- Freud, S. (1916–1917). *Introductory Letters on Psychoanalysis*. London, England: Hogarth Press.
- Glăveanu, V. P. (2010). Towards a cultural psychology of creativity. *Culture & Psychology, 16*, 147–163.
- Gregerson, M. B. J. (2007). Creativity enhances practitioners' resiliency and effectiveness after a hometown disaster. *Professional Psychology: Research and Practice, 38*, 596–602.
- Harris, A.H. (2007). Dance/movement therapy approaches to fostering resilience and recovery among African adolescent torture survivors. *Torture, 17*, 134–155.
- Hilliard, R. E. (2006). The effect of music therapy sessions on compassion fatigue and team building of professional hospice caregivers. *The Arts in Psychotherapy, 33*, 395–401.
- Johnson, D. R. (1987) The role of the creative arts therapies in the diagnosis and treatment of psychological trauma. *Arts in Psychotherapy, 14*, 7–13.
- Jung, C. G. (1934) *Mandala Symbolism*. Princeton, NJ: Princeton University Press.

- Khan, I. (1979). *The Bowl of Saki*. Geneva, Switzerland: SUB Publishing.
- Koff-Chapin, D. *Soul Cards Oracle Deck. 60 cards*. Langley, WA: Center for touch drawing.
- Medland, J., Howard-Ruben, J., & Whitaker, E. (2004). Fostering psychosocial wellness in oncology nurses: Addressing burnout and social support in the workplace. *Oncology nursing forum, 31*, 47–54.
- Mukherjee, S., Beresford, B., Glaser, A., & Sloper, P. (2009). Burnout, psychiatric morbidity, and work-related sources of stress in paediatric oncology staff: A review of the literature. *Psycho-Oncology, 18*, 1019–1028.
- Murant, G. M., & Amonite, D. (2000). Creativity and self-care for caregivers. *Journal of Palliative Care, 16*, 44–49.
- Rapaport, M. H., Schettler, P., & Bresee, C. A. (2009). A preliminary study of the effects of a single session of Swedish massage on hypothalamic-pituitary-adrenal and immune function in normal individuals. *The Journal of Alternative and Complementary Medicine, 16*, 1079–1088.
- Richman, J. M., & Rosenfeld, L. B. (1987). Stress reduction for hospice workers: A support group model. *Hospice journal, 3*, 205–221.
- Segabutle, Y. M. (2010). *An Exploration of the Mourning Rituals of Child Headed Households. Unpublished minor dissertation*. University of Johannesburg, South Africa.
- Smit, R. (2005). HIV/AIDS and the workplace: Perceptions of nurses in a public hospital in South Africa. *Journal of Advanced Nursing, 51*, 22–29.
- Stuckey, H. L., & Nobel, J. (2010). The connection between art, healing, and public health: A review of current literature. *American Journal of Public Health, 100*, 254–263.
- Swanson, D. M. (2007). Ubuntu: An African contribution to (re)search for/with a 'humble togetherness'. *The Journal of Contemporary Issues in Education, 2*, 53–67.
- Van der Kolk, B., & van der Hart, O. (1991) The intrusive past: The flexibility of memory and the engraving of trauma. *American Imago, 48*, 425–454.
- Warren, F. (1970). *The Music of Africa: An Introduction*. Englewood Cliffs, NJ: Prentice Hall.
- Wright, M., Wood, J., Lynch, T., & Clark, D. (2008). Mapping levels of palliative care development: A global view. *Journal of Pain and Symptom Management, 5*, 469–85.
- Walton, P., & Latham, N. (2005). Complementary therapy services for mental health service users: Results of a consultation project. *Health Education Journal, 64*, 347–362.

The background is an abstract composition of warm, textured brushstrokes in shades of yellow, orange, and red. Overlaid on this is a dark silhouette of a person's head and shoulders, facing right. The overall effect is one of depth and emotional resonance.

5

Experiencing adversity in South Africa: Relationship between PTSD symptoms, posttraumatic growth and resilience among students

Nadine van Westrhenen
Marietjie Vosloo
Adri Vermeer
Rolf J. Kleber

Submitted

Acknowledgment of author contributions:
Research design: N van Westrhenen & M Vosloo,
Data collection: N van Westrhenen & M Vosloo,
Data analysis: N van Westrhenen & M Vosloo,
Paper writing: N van Westrhenen, M Vosloo, A Vermeer, & R Kleber

Abstract

Objective: South Africa is a country with very high rates of interpersonal violence and terror. Students in tertiary education are frequently subject to traumatic experiences. This may lead to distress, malfunctioning and impaired academic performance. In this study, posttraumatic stress symptoms and positive adaptation in the face of adversity are explored.

Method: After initial screening for exposure to a traumatic event using the Life Events Checklist, an opportunity sample of 157 bursary students in tertiary education in South Africa completed the Impact of Events Scale, the Short Inventory for Posttraumatic Growth, and the Child and Youth Resilience Measure.

Results: Participants reported high levels of resilience and posttraumatic growth, yet over 50% of the students also met the criteria indicative for a PTSD diagnosis. Students put a lot of emphasis on individual coping, and scored low on social care and peer support. Posttraumatic stress symptoms and resilience independently contributed to increasing levels of posttraumatic growth.

Conclusion: Findings highlight the importance of adequate psychosocial support for students after experiencing adversity, especially focusing on resilience, social and peer support. Further research contributing to an increased understanding of the psychological needs of university students, specifically in a context with high rates of ongoing violence and crime, is needed.

Key words: trauma, PTSD, resilience, posttraumatic growth, students, South Africa

Introduction

Trauma Exposure in South Africa

Over the past decades, the population in South Africa has been exposed to several and severe forms of violence and terror. During Apartheid, up to 1994, people were subjected to violations of human rights such as suppression, detention without trial and torture (Truth and Reconciliation Commission, 1998), leaving indelible marks upon society. Post-Apartheid South Africa is characterized by increased hostility and interpersonal violence, with lifetime exposure rates of violence and injuries between 75% and 90% (Seedat, van Niekerk, Jewkes, Suffla, & Ratele, 2009; Williams et al., 2007), and multiple exposure being more common than single exposure (Seedat et al., 2009). The many violent protests held since 2015 in South Africa's university campuses testify to the socio-economic struggles that these young adults encounter on a daily basis. Moreover, the HIV and AIDS epidemic is the leading cause of all death and disability-adjusted life years (DALYs) lost in South Africa, and forms a great source of stress and sorrow (Seedat et al., 2009).

Just like the general population, the student population in South Africa is frequently exposed to traumatic events, with reported estimates ranging from 70.6% (Hoffman, 2002) to 90% (McGowan & Kagee, 2013) of year vs lifetime exposure respectively. The most frequently reported serious life event across studies with students in South Africa has been the loss of a close other, including unexpected death or life threatening illness of a loved one (Hoffman, 2002; McGowan & Kagee, 2013). Other frequently reported extreme life experiences included witnessing or experiencing interpersonal violence, having one's life threatened and accidents (McGowan & Kagee, 2013). Students exposed to adversity are at increased risk for depression, anxiety and suicide ideation (Bantjes, Kagee, McGowan, & Steel, 2016), alcohol abuse (Pengpid, Peltzer, van der Heever, & Skaal, 2013), cognitive deficiencies (Schoeman, Carey, & Seedat, 2009), and impaired academic performance (Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2016). Research in South Africa on both negative and positive consequences of adversity with students is scarce, and therefore requires attention.

Posttraumatic Stress Disorder

Exposure to a serious life event can lead to disorders such as *posttraumatic stress disorder* (PTSD). PTSD includes different symptoms clustered as re-experiencing, avoidance, negative cognitions and mood, and arousal (American Psychiatric Association, 2013). Fortunately, not everyone develops PTSD after exposure to a traumatic event. In South Africa, lifetime PTSD rates were found between 6% (Ward, Flisher, Zissis, Muller, & Lombard, 2001) and 22% in adolescents (Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004). Reported HIV and AIDS related PTSD rates are higher but vary with a wide

range reported between 5% (Myer et al., 2008) and 54% (Martin & Kagee, 2011), depending on the definitions used, the research methods, and the location of the study.

Different variables have been found to affect the development of PTSD. Females are more likely to meet PTSD diagnoses than males (Fincham, Altes, Stein, & Seedat, 2009; Gwadz, Nish, Leonard, & Strauss, 2007; McGowan & Kagee, 2013; Tolin & Foa, 2006), and black adolescents and students are more exposed to trauma and consequently experience more severe PTSD symptoms than their white counterparts (Fincham et al., 2009; McGowan & Kagee, 2013). Exposure to multiple traumas increases the chance of experiencing (more severe) symptoms of PTSD compared to exposure to a single event (McGowan & Kagee, 2013; Seedat et al., 2004; Suliman et al., 2009). The type of traumatic event also appears to have an influence on the development of PTSD. Criminal assault and childhood abuse had the strongest association with PTSD among men in South Africa, for women the strongest factor was intimate partner violence (Kaminer, Grimsrud, Myer, Stein, & Williams, 2008).

Positive Transformation After Trauma

For decades, the primary research focus of traumatic stress studies has been on psychopathological consequences. Recently, a growing body of empirical evidence shows positive factors that facilitate mental health despite exposure to an adverse life event. One of these factors is *resilience*, or the ability to adapt successfully to adversities in life (Wagnild, 2009). There has been quite some debate about whether resilience is a trait, a personal quality that allows people to thrive in the face of adversity, or a state as consequence of surviving a traumatic event without developing psychopathology (Haglund, Nestadt, Cooper, Southwick, & Charney, 2007). In the current study, resilience is not used as an individual quality, but as an ecological construct described by Ungar (2008) as “the capacity of individuals to navigate their way to health sustaining resources, including opportunities to experience feelings of wellbeing, and a condition of the individual’s family, community, and culture to provide these health resources and experience in culturally meaningful ways” (p. 225). In previous studies in South Africa, students and youth appeared resilient in response to social stressors such as poverty, and resilience was found to be enhanced by individual characteristics such as motivation and goal orientation, support of families and role models, and supportive communities, schools and spirituality (Dass-Brailsford, 2005; Theron & Theron, 2010).

Exposure to traumatic events can also lead to personal transformation that goes beyond bouncing back to a state before the event (i.e. resilience), involving transformation that exceeds pre-trauma levels, which is labelled as *posttraumatic growth* (PTG; Tedeschi & Calhoun, 2004). Benefits of PTG include an increased appreciation of life, improved

interpersonal relationships, increased sense of personal strength, positive change in life priorities, and a richer existential and spiritual life (Tedeschi & Calhoun, 2004). Previous studies investigating PTG in South Africa reported relatively low scores in an urban community sample (Peltzer, 2000), yet studies on PTG in South Africa are scarce.

Relationship Between PTSD Symptoms, PTG and Resilience

Relationships between PTSD symptoms, PTG and resilience have been examined in several studies, but results are quite inconclusive. Depending on which definition was used, resilience (defined as a trait) was found to be positively associated with PTG (Bensimon, 2012; Duan, Guo, & Gan, 2015), but resilience (defined as a lack of PTSD) was also negatively associated with PTG (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009). Findings on the relationship between resilience and PTSD also differ; some studies suggested that resilience might moderate the effect of trauma exposure on PTSD symptoms (Campbell-Sills, Cohan, & Stein, 2006; Connor, Davidson, & Lee, 2003; Fincham et al., 2009), other studies found a negative relationship between resilience and PTSD (Ying, Wu, Lin, & Jiang, 2014) or no relationship at all (Mažulytė et al., 2014).

Lastly, some studies found that PTSD symptoms and PTG are negatively related (Frazier, Conlon, & Glaser, 2001), others found a positive relationship (Alisic, Van der Schoot, Van Ginkel, & Kleber, 2008; Hall et al., 2010), or no relationship at all (Sleijpen, Haagen, Mooren, & Kleber, 2016; Widows, Jacobsen, Booth-Jones, & Fields, 2005). A nonlinear relationship was also suggested, in which PTSD symptoms at first are associated with an increase in PTG, but when the PTSD symptoms become more severe, PTG decreases (Shakespeare-Finch & Lurie-Beck, 2014).

Current Study

Working with a group of bursary students from disadvantaged backgrounds, we observed high levels of resilience but at the same time also noticed symptoms of PTSD. This observation prompted a study to better understand the relationship between positive and negative adaptation after adversity. The current study aims to contribute to the scarce body of knowledge on positive adaptation in the face of adversity among South African students, by examining the relationship between resilience, posttraumatic stress symptoms and posttraumatic growth. We hypothesized against the backdrop of previous findings in other populations that perceived posttraumatic growth would be both positively associated with posttraumatic stress symptoms and resilience in this population. We also hypothesized based on previous findings that resilience would act as a moderator between posttraumatic stress symptoms and PTG. Lastly, we conducted principal component analyses to explore relevant information locked up in the sub-scales that would shed further light on the relationships under

study, and a series of bivariate analyses in order to determine the possible effect of trauma characteristics on the main variables.

Method

Participants

After screening for exposure to a significant stressful life event in a group of 411 South African students, a total of 157 students across different South African institutions that were part of the StudyTrust Bursary Scheme participated. StudyTrust selects students from previously disadvantaged backgrounds, applying specific selection criteria based on income (low income to no family income) and gender (at least 50% female, and for science, technology, engineering and mathematics, or STEM subjects specifically 60% female). All 157 students in this study had been exposed to a traumatic event. The 157 participants consisted of 61% female, 76% African, 6% Coloured, 8% Indian, and 10% White students. Their age varied between 18 and 32 years (Mean=21.3, SD=1.8). See Table 1 for demographic information.

Table 1: Demographic data of the participants (n=157)

Variables		Frequency	Percent
Gender	Male	62	39.5
	Female	95	60.5
Ethnicity	African	120	76.4
	Coloured	9	5.7
	Indian	13	8.3
	White	15	9.6
Year of study	1 st	25	15.9
	2 nd	48	30.6
	3 rd	53	33.8
	4 th	19	12.1
	Honours	12	7.6
Province	Eastern Cape	7	4.5
	Free State	3	1.9
	Gauteng	91	58.0
	KwaZulu-Natal	21	13.4
	Limpopo	1	0.6
	North West	5	3.2
	Western Cape	29	18.5

Instruments

Life events exposure: The Life Events Checklist for DSM-5 (LEC-5) is a self-report measure designed to screen for potentially traumatic events in a respondent's lifetime. The LEC-5 includes a total of 17 items for which the participants indicate whether they experienced the event or not, assessing exposure to 16 events known to potentially result in PTSD or distress and one additional item assessing any other extraordinarily stressful event not captured in the first 16 items (Weathers et al., 2013). The psychometric properties of the original LEC show good test-retest reliability with $r = .82$, and the LEC-5 confirmed strong convergence with similar measures on exposure to trauma ($r = -.55$) (Gray, Litz, Hsu, & Lombardo, 2004).

The students were also asked in separate questions about the frequency of the confrontation with the traumatic event (only once vs more than once), and timeframe (within the last month, 1 to 3 months ago, 4 to 6 months ago, 6 to 12 months ago, 12 to 24 months ago, more than 24 months ago).

Resilience: Resilience is measured with the Child and Youth Resilience Measure (CYRM-28, Resilience Research Center, 2009). The instrument consists of 28 items, and all items are rated on a 5-point scale from 1 (*does not describe me at all*) to 5 (*describes me a lot*), with higher scores indicating increased presence of resilience. The CYRM-28 measures resilience as defined by Ungar (2008) across 3 different domains and 8 subscales; individual domain (including subscales personal skills, peer support, social skills), the relationship with the primary caregiver (including subscales physical care giving and psychological care giving), and the context or sense of belonging (including subscales spiritual, education, cultural). The CYRM-28 shows good internal reliability in different cases with α ranging from .65 to .90 (Liebenberg, Ungar, & van de Vijver, 2011), and Cronbach's alpha in the current study was good ($\alpha = .89$).

Posttraumatic stress symptoms: Posttraumatic stress symptoms were measured using the Impact of Events Scale-Revised (Weiss, 2007). The self-report questionnaire consists of 22-items, representing all three DSM-IV PTSD symptom clusters: avoidance, intrusion, and hyperarousal. The items indicate the amount of distress experienced during the past seven days with respect to the event, rated on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). According to the criteria for the IES-R (Weiss, 2007), scores of 33 or more out of the maximum score of 88 signify the likely presence of PTSD. The IES-R showed good internal consistency with Cronbach's alpha coefficients ranging from .81 to .91 (Weiss, 2004). Cronbach's alpha in the current study was excellent ($\alpha = .92$).

Posttraumatic growth: Posttraumatic growth was measured with the short form of the Posttraumatic Growth Inventory (PTGI-SF, Cann et al., 2010). The PTGI-SF consists of 10 items with a 6-point response scale ranging from 0 (*I did not experience this change*) to 5 (*I experienced this change a great deal*). The PTGI-SF measures five scales: relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. The PTGI-SF total score has shown excellent internal reliability (Cronbach's alpha around .90) across multiple samples (Cann et al., 2010), a value consistent with that found in the current study ($\alpha = .91$).

Procedure

This study was part of a larger study on traumatic stress in South Africa, for which ethical clearance was provided by the Faculty of Humanities of the University of Johannesburg. The bursary organisation and its funding partners also provided permission to conduct the study and subsequently all bursary recipients in 2015 ($n=497$) were invited to participate. The students were informed about the purpose of the study and signed informed consent. In total 411 students responded, of which 195 indicated they had experienced something traumatic (47%). Inclusion in the study was based on screening of the Life Event Checklist, therefore, only if the students indicated they had experienced at least one traumatic event ($n=195$) they were asked to complete the remaining three questionnaires, in English. In total 157 responded. Data were collected via two different online tools; initial collection took place via StoryConnect 1.1 as part of a larger research study. The follow-up was done through SurveyMonkey specifically for the purpose of this study.

Analysis

All analyses were performed using SPSS.22. First, data were explored by analysing simple descriptive statistics, including trauma variables and trauma response instruments. Bivariate correlations were calculated to examine the relationship among PTG, resilience, and posttraumatic stress symptoms, and a moderation model was tested for the moderating role of resilience between posttraumatic stress symptoms and posttraumatic growth. In the moderator analysis, we tested the relation between PTSD and PTG, between resilience and PTG, and then the interaction effect between PTSD and resilience on PTG (see Figure 1) with multiple linear regression, using the PROCESS Procedure for SPSS (Hayes, 2013). Lastly, the subscales of the PTGI, CYRM-28 and IES-R were further explored in a principal component analysis to add to the understanding of relations among variables. There were no missing data. Results were considered significant at the .05 significant level.

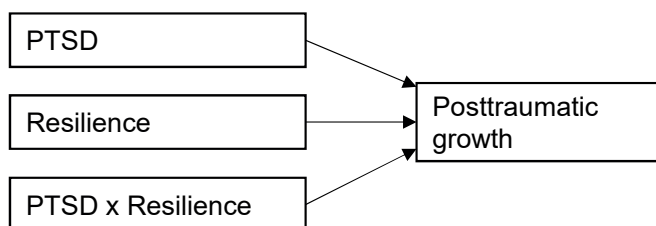


Figure 1: Statistical moderation model used to test the moderating role of resilience on the relationship between PTSD symptoms and posttraumatic growth.

Results

Traumatic Exposure

The most frequent reported life event was a life-threatening illness or injury (22.9%), followed by the confrontation with sudden accidental or violent death (21.7%), an accident (10.8%), and violent crime (10.8%) (Table 2). Moreover, 68.2% of the respondents experienced a single incident, versus 31.8% that were reported as multiple incidences. More than half of the reported events (58.6%) took place within the past six months. Most events involved direct exposure in which it either happened to the student themselves (39.5%), or they witnessed it (24.8%), and 19.7% heard about the event (Table 2).

Overall Responses to Adversity

Looking at the student's responses after experiencing adversity, the distribution of scores on the different scales (PTGI-SF, IES-R and CYRM-28) was skewed with 75% or more of the sample scores falling in one half of the scale. The students showed relatively high levels of resilience (Median=111, Q1=104, Q3=119, out of a possible 140), high levels of posttraumatic growth (Median=35, Q1=24, Q3=41, out of a possible 50), and relatively high levels of posttraumatic stress symptoms (Median=33, Q1=20, Q3=45, out of a possible 88). Based on Weiss' (2007) criteria for PTSD diagnosis, 79 participants (50.3%) were classified under a PTSD group and 78 participants (49.7%) were classified under a non-PTSD group.

The subscales of the different instruments contained information on what specifically contributed to the relatively high total scores, for the overall sample group. The highest average scores were found for the IES-R sub-scale avoidance symptoms, meaning that the students reported most frequently that they tried not to think or talk about what happened, and avoided getting upset when thinking about or being reminded of what happened. High average scores for both resilience and posttraumatic growth were most frequently recorded for factors relating to school and the importance of getting

an education, and personal skills and strength. Peer support and caregiver support (e.g. having enough to eat, emotional involvement) scored relatively low.

Table 2: Details of traumatic events reported by participants (n=157)

	Frequency	Percent
<i>Single/multiple events</i>		
Once	107	68.2
More than once	50	31.8
<i>Timeframe since event</i>		
Within the last month	24	15.3
1-3 months ago	40	25.5
4 to 6 months ago	28	17.8
6 to 12 months ago	24	15.3
12-24 months ago	19	12.1
More than 24 months ago	19	12.1
I'm not sure/can't remember exactly	3	1.9
<i>Exposure</i>		
It happened to me	62	39.5
I witnessed it	39	24.8
I heard about it (learned about it/ part of my studies)	31	19.7
I'm not sure	25	15.9
<i>Type of traumatic event</i>		
Life-threatening illness or injury	36	22.9
Traumatic death (Sudden accidental / violent death)	34	21.7
Accident (Transportation accident / other serious accident)	17	10.8
Violent crime (assault with a weapon / hijacking / robbery)	17	10.8
Any other very stressful event or experience	16	10.2
Severe human suffering	14	8.9
Grief (loss of loved one)	12	7.6
Sexual/ physical assault	6	3.8
Disaster (Natural disaster / Fire / Explosion)	5	3.2

Trauma Variables and Response to Trauma

Analysis using the independent samples t-test demonstrated that multiple exposure to traumatic events (Mean = 37.48) significantly related to more posttraumatic stress symptoms than single exposure (Mean = 30.97) ($t(155) = -2.32, p < .05$). In the Kruskal-Wallis H test analysis distance of trauma exposure (i.e. it happened to me, I witnessed it, I heard about it, not sure) was related to resilience ($H(3) = 10.9, p < .05$). Post-hoc test using the Mann-Whitney U Test showed that students that heard about the event

scored significantly higher in resilience compared to those that witnessed the event ($U = 383, p < .01$). Lastly, certain events appeared to be related to higher scores on posttraumatic growth (e.g. violent crime, assault, life threatening illnesses, severe human suffering and traumatic death), while others were related to lower PTG (i.e. disasters, accidents, and grief) ($H(8) = 15.9, p < .05$).

Resilience, PTG and Posttraumatic Stress Symptoms

Spearman correlation analysis demonstrated a moderate positive relationship between PTG and resilience ($r = 0.34, p < .01$). PTG and posttraumatic stress symptoms also showed a weak positive relationship ($r = .22, p < .01$). No relationships were found between posttraumatic stress and resilience ($r = -.06, p = .464$). These findings suggest that students with high levels of resilience tend to have high levels of posttraumatic growth, or that students with high levels of posttraumatic growth tend to have high levels of resilience. However, resilience holds no relationship with posttraumatic stress symptoms. Students with high levels of posttraumatic stress symptoms, however, also tend to show high levels of posttraumatic growth. These results supported our hypothesis that perceived posttraumatic growth would be both positively associated with posttraumatic stress symptoms and resilience.

Further exploration of the PTGI-SF, IES-R and CYRM-28 subscales using scaled principal component analysis (PCA) resulted in four principal components that had eigenvalues over Kaiser's criterion of 1 and combined explained 66.4% of the variance (Table 3). High scores on component 1 correlated with high sense of PTG, especially spiritual change, relating to others and new possibilities, as well as cultural belonging, personal and social skills, explaining 29.2% variance. Component 2 contrasted PTSD symptom clusters (avoidance, intrusion and hyperarousal) with peer support, personal skills, and education, explaining 19.5% variance. Component 3 contrasted PTG (specifically appreciation of life) with PTSD symptom clusters (avoidance, intrusion and hyperarousal), explaining 11.0% of variance. Finally, component 4 describes the level of care (especially physical care) the students take of themselves and explained 6.8% of variance. Table 3 also contains the descriptive statistics of the different subscales.

No support was found for our hypothesis that resilience would act as a moderator between posttraumatic stress symptoms and PTG. In the moderation model, the coefficients for resilience ($b=0.31, p < .001$) and PTSD ($b=0.19, p < .001$) were both significant, while the coefficient for the interaction between resilience and PTSD was not ($b=0.01, p = .074$). Hence resilience and PTSD both contributed independently to PTG; resilience did not moderate the effect of PTSD on PTG (Table 4).

Table 3: Summary of principal component analysis results indicating correlations between the variables and the components for subscales PTGI, CYRM and PTSDC (n=157)

Scale [Median, Q1-Q3]	Component			
	1	2	3	4
PTSD_Avoidance [1.88, 1.13-2.25]	.321	.570	.528	.095
PTSD_Intrusion [1.50, 0.75-2.13]	.116	.699	.596	-.017
PTSD_Hyperarousal [1.67, 0.50-1.83]	.159	.704	.547	-.038
CYRM_PersonalSkills [4.20, 3.80-4.60]	.645	-.413	.160	-.296
CYRM_PeerSupport [4.00, 3.50-3.50]	.417	-.495	.138	-.131
CYRM_SocialSkills [4.00, 3.50-4.50]	.638	-.365	.147	-.283
CYRM_PhysicalCare [3.50, 3.00-4.00]	.311	-.295	.017	.758
CYRM_PsychologicalCare [4.00, 3.40-4.40]	.612	-.344	.209	.335
CYRM_Spiritual [4.00, 3.33-4.67]	.596	-.136	.097	.194
CYRM_Education [4.50, 4.00-5.00]	.494	-.419	.230	-.306
CYRM_Culture [4.00, 3.60-4.40]	.650	-.388	.253	.043
PTGI_RelatingToOthers [3.00, 1.25-4.00]	.668	.344	-.337	-.032
PTGI_NewPossibilities [3.50, 1.50-4.00]	.650	.451	-.350	-.048
PTGI_PersonalStrength [4.00, 2.50-4.50]	.609	.392	-.293	-.147
PTGI_SpiritualChange [3.50, 1.75-4.50]	.719	.287	-.248	.194
PTGI_AppreciationOfLife [3.50, 2.50-4.50]	.534	.382	-.447	-.050
Eigenvalues	4.672	3.112	1.752	1.081
% of variance	29.201	19.447	10.950	6.755

Note: Components over .40 appear in bold

Table 4: Linear model of predictors of PTG, with 95% bias corrected and accelerated confidence intervals reported in parentheses.

	b	SE B	t	p
Constant	31.18 [29.36, 33.00]	0.92	33.87	$p < .001$
Resilience	0.31 [0.16, 0.45]	0.07	4.21	$p < .001$
PTSD	0.19 [0.08, 0.29]	0.05	3.51	$p < .001$
Resilience x PTSD	0.01 [-0.00, 0.02]	0.01	1.80	$p = .0743$

Note. $R^2 = .19$

Discussion

The aim of this study was to explore positive adaptation in the face of adversity among a large population of South African students, and the relationship between resilience, posttraumatic stress symptoms and posttraumatic growth. Below we will discuss our findings in light of previous studies and we will also provide an overview of the strengths and limitations of the current study.

Traumatic Exposure

Students in this study were frequently exposed to life-threatening illnesses including HIV and AIDS, road-traffic injuries and interpersonal violence such as hijackings, robberies but also homicides. A similar result was found in previous studies in South Africa (Hoffmann, 2002; McGowan & Kagee, 2013; Seedat et al., 2009; Williams et al., 2007). About one third of the students reported exposure to more than one event. The overall exposure rate in the current study (47%) was considerably lower compared to previously reported lifetime exposure rates (90%, McGowan & Kagee, 2013) and even twelve-month exposure rates (71%, Hoffman, 2002) in South Africa. However, comparison of prevalence rates between these studies is complicated by the considerable differences in timeframes and definitions of traumatic events.

Students in this study reported high levels of resilience and posttraumatic growth, suggesting a sample demonstrating positive characteristics. At the same time, 50% of the students exposed to a traumatic event did report symptoms that met criteria for PTSD. This percentage of PTSD is extremely high, as previous South African studies using self-report questionnaires reported on prevalence rates between 6% and 22% (Seedat et al., 2004; Ward, Flisher, Zissis, Muller, & Lombard, 2001). A possible explanation for these contrasting findings is again the different instruments and diagnostic criteria applied to establish PTSD. However, considering the context and disadvantaged background of the students in our study growing up in mostly violent communities and extreme poverty (Seedat et al., 2009), it is likely that this population has been exposed to multiple stressful events not reported in this study that may have contributed to high levels of PTSD. It has been shown that cumulative experiences of violence and abuse predict a higher prevalence of PTSD (Briere, Kaltman, & Green, 2008; Cloitre et al., 2009).

Certain characteristics of traumatic events were found to be associated with less adaptive outcomes. Close distance to the traumatic event was related to low levels of resilience, and multiple exposure was related to higher posttraumatic stress symptoms. Previous studies have looked into the frequency of exposure and also found similar results (McGowan & Kagee, 2013; Seedat et al., 2004; Suliman et al., 2009).

Resilience, PTG and Posttraumatic Stress Symptoms

Support for resilience as a moderator between posttraumatic stress symptoms and PTG was not found. Previous studies were also inconclusive about this relationship (i.e. Campbell-Sills et al., 2006; Fincham et al., 2009; Mažulytė et al., 2014). However, we did find that PTG was positively associated with posttraumatic stress symptoms and resilience in this population. More specifically both resilience and posttraumatic stress symptoms were independently related to increased PTG (Figure 2).

At first, the positive relationship between PTG and PTSD seems rather counter-intuitive; PTG describes positive aspects of wellbeing and growth, and PTSD is a psychological disorder causing significant impairment. Yet, our findings did confirm previous results (Alisic, Van der Schoot, Van Ginkel, & Kleber, 2008; Hall et al., 2010, Levine et al., 2009), and researchers have looked at explaining this relationship from different perspectives. One perspective explains that those who have experienced more severe traumatic events may develop more severe PTSD symptoms as well as seeking more PTG (e.g. Johnson et al., 2007; Pat-Horenczyk & Brom, 2007). From another perspective, PTG has been related to a more repressive coping style including emotion-focused coping and a numbing inaction (Johnson et al., 2007), such as emotional dissociation. This was confirmed in our study by the relatively high levels both of PTG and avoidance behaviour reported.

The concept of resilience in this study was relatively broad (Ungar, 2008) and based on a social ecological perspective, including both individual, caregivers and contextual factors, rather than only individual qualities as defined in most previous studies. We did find the definition by Ungar particularly useful in this context, because it is more culturally sensitive in a collectivist society where individuals emphasize family and community above individual needs and desires.

Analysis of the sub-scales in this study showed that the students put a lot of emphasis on individual factors including personal skills and social skills as well as the educational context. The finding that resilience was mostly attributed to school was in line with the specific sample of bursary students attending tertiary education. For the students in this sample, education can be a great source of hope for a better future as it can break the cycle of poverty in a family and increase chances of employment. The factors peer support, physical caregiving and psychological caregiving generally scored low, yet these factors were shown in the PCA to relate to lower posttraumatic stress symptoms. This makes sense, because in previous studies perceived social support has been mentioned as an important protective factor against the development of PTSD (i.e. Cluver, Fincham, & Seedat, 2009). This emphasizes the importance of high-

lighting broader aspects of resilience, including peer support, through psychosocial support programmes for students.

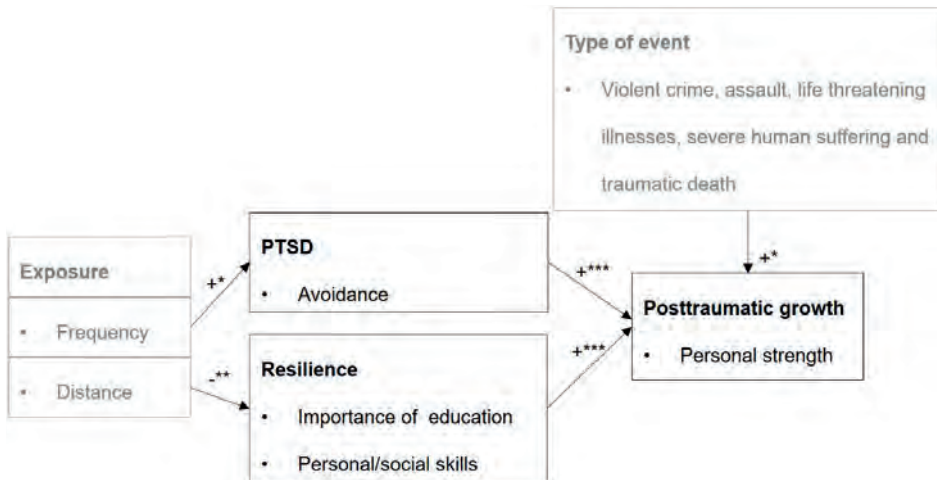


Figure 2: Summary of the relationships between variables in this study

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Strengths and Limitations

The strength of this study was the access to a sample of students that was more representative of the South African student population compared to previous studies, specifically in terms of ethnic groups and range of tertiary institutions and provinces represented (for instance McGowan & Kagee, 2013). The relative large sample size was also a strength of this study. Based on the participation in the StudyTrust Bursary Scheme, certain factors were assumed equal across the sample that in previous studies were considered confounding variables, most importantly socioeconomic status. All participating students came from disadvantaged backgrounds, meaning a lack of financial support, coming from communities exposed to high levels of violence, and for instance making use of public transport (prone to accidents).

A limitation was the LEC instrument that including items such as “Severe human suffering” and “Any other very stressful event or experience” that are not clearly specified and could possibly lead to subjective interpretation. Specific events in the LEC were less likely to happen in this context (i.e. natural disaster, exposure to toxic substance, combat or exposure to a war-zone), compared to others (i.e. life-threatening illness, assault with a weapon, transportation accident). Therefore, the LEC life events list was not entirely suitable for this context, and categories had to be recoded before analysis. Table 2 provides the re-coded categories used in analysis. Moreover, we did not look

into exposure to traumatic events prior to university, which may have put students at increased risk for developing PTSD (Copeland, Keeler, Angold, & Costello, 2007; Finkelhor, Turner, Omrod, & Hamby, 2009).

Lastly, all results were obtained solely through self-report measures. Especially with measuring PTSD using the IES-R this might be putting the study at risk for over-estimating prevalence rates. A clinical interview might have been more reliable in this regard. However, Beck et al. (2008) did find the IES-R to have good discriminative validity, meaning that it successfully differentiated between individuals with and without PTSD diagnosis.

Implications and Recommendations

The current study shows a more elaborate picture of adaptation after adversity compared to previous studies in terms of the sample characteristics and location of the study. Most studies using these variables have been conducted in a Western context, whereas the current study was in South Africa, specifically with a sample of students coming from disadvantaged and violent backgrounds. Moreover, most South African studies have focused thus far on non-representative samples of the student population, under-representing for instance African students (i.e. Hoffman, 2002; McGowan & Kagee, 2013).

Findings highlight the positive relationship between resilience and PTG and between posttraumatic stress symptoms and PTG. The high levels of PTSD in this population argue for adequate psychosocial support for students after trauma, such as availability of counseling and peer support. The high levels of resilience and the positive relationship between resilience and PTG could be used as resources in interventions, as personal strengths that can be built on and expanded, specifically emphasizing the currently reported low levels of peer and social support.

Findings also point to research directions that enhance understanding of the psychological needs of university students in the South African context with high rates of ongoing violence and crime. The alarming indications of posttraumatic stress disorder pose a concern. Current patterns of high levels of avoidance behaviour in these students can form a risk for later complication of problems. It is important to address negative consequences of trauma earlier on so further damage to (mental) health of the students and further interference with their university career and later life can be prevented or reduced.

Acknowledgements: Data were collected as part of a research project of the Sasol Inzalo Foundation, the Narrative Lab and StudyTrust, which studies tertiary access, throughput and success in South Africa. Data were also collected from bursary recipients from the Investec Bank Bursary Programme and the DG Murray Trust Bursary Programme.

References

- Alisic, E., van der Schoot, T. A. W., van Ginkel, J. R. van, & Kleber, R. J. (2008). Looking beyond PTSD in children: Posttraumatic stress reactions, posttraumatic growth, and quality of life in a general population sample. *Journal of Clinical Psychiatry, 69*, 1455-1462. doi:10.4088/jcp.v69n0913
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
- Bantjes, J. R., Kagee, A., McGowan, T., & Steel, H. (2016). Symptoms of posttraumatic stress, depression, and anxiety as predictors of suicidal ideation among South African university students. *Journal of American College Health, 64*(6), 429-437.
- Beck, J. G., Grant, D. M., Read, J. P., Clapp, J. D., Coffey, S. F., Miller, L. M., & Palyo, S. A. (2008). The Impact of Event Scale-Revised: Psychometric properties in a sample of motor vehicle accident survivors. *Journal of Anxiety Disorders, 22*(2), 187-198. doi:10.1016/j.janxdis.2007.02.007
- Bensimon, M. (2012). Elaboration on the association between trauma, PTSD, and posttraumatic growth: the role of trait resilience. *Personality and Individual Differences, 52*(7), 782-787. doi:10.1016/j.paid.2012.01.011
- Briere, J., Kaltman, S., & Green, B. L. (2008). Accumulated childhood trauma and symptom complexity. *Journal of Traumatic Stress, 21*(2), 223-226. doi:10.1002/jts.20317
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour research and therapy, 44*(4), 585-599. doi:10.1016/j.brat.2005.05.001
- Cann, A., Calhoun, L. G., Tedeschi, R. G., Taku, K., Vishnevsky, T., Triplett, K. N., & Danhauer, S. C. (2010). A short form of the Posttraumatic Growth Inventory. *Anxiety, Stress, & Coping, 23*(2), 127-137. doi:10.1080/10615800903094273
- Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22*(5), 399-408. doi:10.1002/jts.20444
- Cluver, L., Fincham, D. S., & Seedat, S. (2009). Posttraumatic stress in AIDS-orphaned children exposed to high levels of trauma: The protective role of perceived social support. *Journal of Traumatic Stress, 22*(2), 106-112. doi:10.1002/jts.20396
- Copeland, W. E., Keeler, G., Angold, A., & Costello, J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry, 64*(5), 577-584. doi:10.1001/archpsyc.64.5.577
- Connor, K. M., Davidson, J. R., & Lee, L. C. (2003). Spirituality, resilience, and anger in survivors of violent trauma: A community survey. *Journal of traumatic stress, 16*(5), 487-494. doi:10.1023/a:1025762512279
- Dass-Brailsford, P. (2005). Exploring resiliency: academic achievement among disadvantaged black youth in South Africa. *South African Journal of Psychology, 35*(3), 574-591.

- Duan, W., Guo, P., & Gan, P. (2015). Relationships among Trait Resilience, Virtues, Post traumatic Stress Disorder, and Posttraumatic Growth. *PLoS ONE*, *10*(5), e0125707. doi:10.1371/journal.pone.0125707
- Fincham, D. S., Altes, L. K., Stein, D. J., & Seedat, S. (2009). Posttraumatic stress disorder symptoms in adolescents: Risk factors versus resilience moderation. *Comprehensive Psychiatry*, *50*(3), 193–199. doi:10.1016/j.comppsy.2008.09.001
- Finkelhor, D., Turner, H., Omrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, *124*(5), 1–13. doi:10.1542/peds.2009-0467
- Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of consulting and clinical psychology*, *69*(6), 1048-1055. doi:10.1037/0022-006x.69.6.1048
- Gray, M., Litz, B., Hsu, J., & Lombardo, T. (2004). Psychometric properties of the Life Events Checklist. *Assessment*, *11*, 330-341. doi:10.1177/1073191104269954
- Gwadz, M. V., Nish, D., Leonard, N. R., & Strauss, S. M. (2007). Gender differences in traumatic events and rates of posttraumatic stress disorder among homeless youth. *Journal of Adolescence*, *30*(1), 117-129. doi:10.1016/j.adolescence.2006.01.004
- Haglund, M. E. M., Nestadt, P. S., Cooper, N. S., Southwick, S. M., & Charney, D. S. (2007). Psychobiological mechanisms of resilience: Relevance to prevention and treatment of stress-related psychopathology. *Development and Psychopathology*, *19*(03), 889. doi:10.1017/S0954579407000430.
- Hall, B. J., Hobfoll, S. E., Canetti, D., Johnson, R., Palmieri, P., & Galea, S. (2010). Exploring the association between posttraumatic growth and PTSD: A national study of Jews and Arabs during the 2006 Israeli-Hezbollah War. *Journal of Nervous and Mental Disease*, *198*(3), 180-186. doi:10.1097/nmd.0b013e3181d1411b
- Hayes, A. F. 2013. *Introduction to Mediation, Moderation and Conditional Process Analysis*. New York, NY: Guilford Press.
- Hoffmann, W. A. (2002). The incidence of traumatic events and trauma-associated symptoms/experiences amongst tertiary students. *South African Journal of Psychology*, *32*(4), 48–53. doi:10.1177/008124630203200406
- Johnson, R. J., Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., & Palmieri, P. A. (2007). Posttraumatic growth: Action and reaction. *Applied Psychology*, *56*(3), 428-436.
- Kaminer, D., Grimsrud, A., Myer, L., Stein, D. J., & Williams, D. R. (2008). Risk for post-traumatic stress disorder associated with different forms of interpersonal violence in South Africa. *Social Science & Medicine*, *67*, 1589-1595. doi:10.1016/j.socscimed.2008.07.023
- Levine, S. Z., Laufer, A., Stein, E., Hamama-Raz, Y., & Solomon, Z. (2009). Examining the relationship between resilience and posttraumatic growth. *Journal of Traumatic Stress*, *22*(4), 282–286. doi:10.1002/jts.20409
- Liebenberg, L., Ungar, M., & Van de Vijver, F. (2011). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) among Canadian youth. *Research on Social Work Practice*, *22*(2), 219-226. doi:10.1177/1049731511428619

- Martin, L., & Kagee, A. (2011). Lifetime and HIV-related PTSD among persons recently diagnosed with HIV. *AIDS and Behavior*, *15*(1), 125-131. doi:10.1007/s10461-008-9498-6
- Mažulytė, E., Skerytė-Kazlauskienė, M., Eimontas, J., Gailienė, D., Grigutytė, N., & Kazlauskas, E. (2014). Trauma experience, psychological resilience and dispositional optimism: Three adult generations in Lithuania. *Psychology*, *49*, 20-33.
- McGowan, T. C., & Kagee, A. (2013). Exposure to traumatic events and symptoms of post-traumatic stress among South African university students. *South African Journal of Psychology*, *43*(3), 327-339. doi:10.1177/0081246313493375
- Myer, L., Smit, J., Roux, L. L., Parker, S., Stein, D. J., & Seedat, S. (2008). Common mental disorders among HIV-infected individuals in South Africa: prevalence, predictors, and validation of brief psychiatric rating scales. *AIDS patient care and STDs*, *22*(2), 147-158. doi:10.1089/apc.2007.0102
- Pat-Horenczyk, R., & Brom, D. (2007). The Multiple Faces of Post-Traumatic Growth. *Applied Psychology*, *56*(3), 379-385.
- Peltzer, K. (2000). Trauma symptom correlates of criminal victimization in an urban community sample, South Africa. *Journal of Psychology in Africa*, *10*(1), 49-62.
- Pengpid, S., Peltzer, K., van der Heever, H., & Skaal, L. (2013). Screening and brief interventions for hazardous and harmful alcohol use among university students in South Africa: results from a randomized controlled trial. *International journal of environmental research and public health*, *10*(5), 2043-2057.
- Perfect, M. M., Turley, M. R., Carlson, J. S., Yohanna, J., & Saint Gilles, M. P. (2016). School-related outcomes of traumatic event exposure and traumatic stress symptoms in students: A systematic review of research from 1990 to 2015. *School Mental Health*, *8*(1), 7-43.
- Resilience Research Center. (2009). The child and youth resilience measure-28: User manual. Halifax, NS: Resilience Research Center, Dalhousie University.
- Schoeman, R., Carey, P., & Seedat, S. (2009). Trauma and posttraumatic stress disorder in South African adolescents: A case-control study of cognitive deficits. *The Journal of nervous and mental disease*, *197*(4), 244-250.
- Seedat, M., van Niekerk, A., Jewkes, R., Suffla, S., & Ratele, K. (2009). Violence and injuries in South Africa: prioritizing an agenda for prevention. *Lancet*, *374*(9694), 1011-1022. doi:10.1016/s0140-6736(09)60948-x
- Seedat, S., Nyamai, C., Njenga, F., Vythilingum, B., & Stein, D. J. (2004). Trauma exposure and posttraumatic stress symptoms in urban African schools. *The British Journal of Psychiatry*, *184*(2), 169-175. doi:10.1192/bjp.184.2.169
- Shakespeare-Finch, J., & Lurie-Beck, J. (2014). A meta-analytic clarification of the relationship between posttraumatic growth and symptoms of posttraumatic distress disorder. *Journal of Anxiety Disorders*, *28*(2), 223-229. doi:10.1016/j.janxdis.2013.10.005
- Sleijpen, M., Haagen, J., Mooren, T., & Kleber, R. J. (2016). Growing from experience: an exploratory study of posttraumatic growth in adolescent refugees. *European Journal of Psychotraumatology*, *7*. doi:10.3402/ejpt.v7.28698
- Suliman, S., Mkabile, S. G., Fincham, D. S., Ahmed, R., Stein, D. J., & Seedat, S. (2009). Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and

- depression in adolescents. *Comprehensive Psychiatry*, *50*, 121-127. doi:10.1016/j.comp-psych.2008.06.006
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, *15*(1), 1-18. doi:10.1207/s15327965pli1501_01
- Theron, L. C., & Theron, A. M. (2010). A critical review of studies of South African youth resilience, 1990-2008: review article. *South African journal of science*, *106*(7-8), 1-8.
- Tolin, D. F., & Foa, E. B. (2006). Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research. *Psychological bulletin*, *132*(6), 959-992. doi:10.1037/1942-9681.s.1.37
- Truth and Reconciliation Commission. (1998). *Truth and Reconciliation Commission of South Africa report*. Cape Town, South Africa: CTP.
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work*, *38*, 218-235. doi:10.1093/bjsw/bcl343
- Wagnild, G. (2009). A Review of the Resilience Scale. *Journal of Nursing Measurement*, *17*(2), 105-113. doi:10.1891/1061-3749.17.2.105
- Ward, C. L., Flisher, A. J., Zissis, C., Muller, M., & Lombard, C. (2001). Exposure to violence and its relationship to psychopathology in adolescents. *Injury prevention*, *7*(4), 297-301. doi:10.1136/ip.7.4.297
- Weathers, F.W., Blake, D.D., Schnurr, P.P., Kaloupek, D.G., Marx, B.P., Keane, T.M. (2013). The Life Events Checklist for DSM-5 (LEC-5). Instrument available from the National Center for PTSD. (www.ptsd.va.gov).
- Weiss, T. (2004). *Assessing psychological trauma and PTSD. The Impact of Event Scale Revised; pp. 168-189*. New York, NY: The Guilford Press.
- Weiss, D. S. (2007). The impact of event scale: revised. In *Cross-cultural assessment of psychological trauma and PTSD* (pp. 219-238). Springer US.
- Widows, M. R., Jacobsen, P. B., Booth-Jones, M., & Fields, K. K. (2005). Predictors of posttraumatic growth following bone marrow transplantation for cancer. *Health Psychology*, *24*(3), 266-273. doi:10.1037/0278-6133.24.3.266
- Williams, S. L., Williams, D. R., Stein, D. J., Seedat, S., Jackson, P. B., & Moomal, H. (2007). Multiple traumatic events and psychological distress: The South Africa stress and health study. *Journal of traumatic stress*, *20*(5), 845-855. doi:10.1002/jts.20252
- Ying, L., Wu, X., Lin, C., & Jiang, L. (2014). Traumatic severity and trait resilience as predictors of posttraumatic stress disorder and depressive symptoms among adolescent survivors of the Wenchuan earthquake. *PLoS ONE*, *9*(2), e89401. doi:10.1371/journal.pone.0089401.

The background of the page is an abstract, textured composition. It features a central, dark silhouette of a child's face, looking slightly to the right. This silhouette is overlaid with various colorful brushstrokes and splatters in shades of red, orange, yellow, green, and blue. The overall effect is artistic and expressive, suggesting the theme of creative arts in therapy.

6

Creative arts in psychotherapy treatment protocol for children after trauma

Nadine van Westrhenen
Elzette Fritz
Helen Oosthuizen
Suzan Lemont
Adri Vermeer
Rolf J. Kleber

The Arts in Psychotherapy 2017: 54, 128-135.
[doi:10.1016/j.aip.2017.04.013](https://doi.org/10.1016/j.aip.2017.04.013)

Acknowledgment of author contributions:
CAP treatment protocol design: N van Westrhenen & E Fritz, H Oosthuizen & S Lemont,
Paper writing: N van Westrhenen & E Fritz, H Oosthuizen, S Lemont, A Vermeer & R Kleber

Abstract

In this article, we introduce a Creative Arts in Psychotherapy (CAP) treatment protocol for children who have been traumatized, aiming to enhance their psychological wellbeing and strengthening positive development. The protocol combines principles of group dynamics and multimodal arts activities in order to facilitate healing through the three stages of the trauma recovery model; creating a safe space, telling the trauma story, and preparing the children to return to the community. The programme takes place over a period of ten 90-minute sessions. The CAP therapeutic process is designed to be run in groups of six to eight participants in the age between 8 to 12 years. The described protocol aims to bring more uniformity in the management of child trauma in multicultural and under-resourced communities. It can be carried out by any qualified health care professional, where clients are seeking help and relief.

Key words: Child trauma, creative arts therapy, treatment protocol, PTSD, group intervention.

Introduction

Sibu¹ is a 12-year old black South African boy, residing in Johannesburg, with his parents and two siblings in a two-room shack. Sibu's family is Christian and their home language is isiZulu. His parents are both unemployed and depend on a child support grant. Two years ago, when Sibu was 10 years old, he was sexually abused. One evening on his way home from soccer practise he was stopped by four strange men, tied up, taken into the park and raped. Soon after this event, Sibu reported excessive fear to walk on the street, and expressed feeling angry about what happened. His parents observed that he withdrew. After conclusion of a forensic assessment, Sibu was referred for therapy.

There are children like Sibu all over the world who are exposed to traumatic experiences that leave them stressed, anxious, or worried. Some of them may develop disturbances afterwards, in particular posttraumatic stress disorder (PTSD). According to the DSM-5, the core symptoms of PTSD include re-experiencing, avoidance, negative alterations in cognitions and mood, and trauma-related alterations in arousal and reactivity (APA, 2013). Some children may also show a positive change as a result of the struggle with trauma, which can be reflected in a measure of posttraumatic growth (PTG; Tedeschi & Calhoun, 2004). PTG includes a greater appreciation and new possibilities for one's life, more meaningful interpersonal relationships, increased sense of personal strength and spiritual development (Tedeschi & Calhoun, 2004). Interventions designed for treatment after trauma and enhancing positive development mostly focus on verbal disclosure, like cognitive behavioural therapy, through which behaviours, emotions and thought processes are challenged and transformed (Beck & Haigh, 2014). For some trauma victims, verbal disclosure works well, yet there are specific populations and age groups, such as young children and refugees, where other means of expression may work more effectively because they incorporate non-verbal forms of processing that can avoid language barriers and may be more culturally sensitive and appropriate (Beauregard, 2014; Malchiodi, 2015; Quinlan, Schweitzer, Khawaja, & Griffin, 2016). There is a strong need for evidence-based treatment that demonstrates that non-verbal and embodied practices, such as those of the creative arts, can be successful in the treatment of trauma clients (Slayton, D'Archer, & Kaplan, 2010; van Westrhenen & Fritz, 2014).

The Creative Arts in Psychotherapy (CAP) programme discussed in this paper was developed and implemented in South Africa, a country with extreme high rates of interpersonal violence and abuse. Interpersonal violence in South Africa is mentioned as the leading risk factor for injury related death, and exceeds four and a half times the

global figures (Seedat, van Niekerk, Jewkes, Suffla, & Ratele, 2009). Violence against children frequently takes place in the form of beatings, sexual violence including rape and also emotional violence and neglect (Seedat et al., 2009). South African figures on child sexual abuse are the highest worldwide, for both boys (60.9%) and girls (43.7%) (Pereda, Guilera, Forns, & Gómez-Benito, 2009). Exposure to single traumatic events is common, but exposure to multiple traumas is even more frequently reported (Williams et al., 2007). Moreover, about 10 million children in South Africa are living in extreme poverty (Hall & Sambu, 2014), and are at increased risk of exposure to chronic physical neglect, domestic and community violence, abandonment, and alcoholic parents (Optimus study, 2016). This type of chronic exposure to adversity may lead to insecure childhoods and developmental trauma, and complex emotional and behavioural problems as a result (van der Kolk, 2005). Poverty and inequality are key contributors to the violent and insecure climate, but also the lack of prevention and intervention fuels the continuation of the intergenerational cycle of violence (Seedat et al., 2009). Psychological services for victims of violence, specifically for abused children, therefore need to be strengthened.

Mental health interventions in South Africa today are conducted by both traditional practitioners such as diviners, herbalists and faith healers, and professionals trained in Western health care services focusing on evidence based practices valued and in use in Western society (Campbell-Hall et al., 2010). Western oriented health care services in South Africa often fail to incorporate the cultural roots and traditions of the African population in therapy, and in combination with the poor public healthcare infrastructure in South Africa, this negatively effects the accessibility and effectiveness of trauma interventions. Creative arts practise, however, can incorporate cultural traditions such as dancing, storytelling, visual depiction, and music, and therefore may be an effective tool in psychotherapy (for instance Bandawe, 2005; Glaveanu, 2010; Harris, 2009).

Creative arts therapy is an umbrella term covering the creative modalities of visual art, dance, drama, creative writing and music. This form of therapy integrates art practices with principles of psychotherapy and counselling (Malchiodi, 2015). Creative treatments are supposed to help externalize thoughts in a safe space (Cassidy, Turnbull, & Gumley, 2014; Malchiodi, 2015), stimulate sensory processing of traumatic memories stored in the body (Harris, 2009; Ho, 2015; Koch, Kunz, Lykou, & Cruz, 2014; Levine, 2010), provide a sense of containment for difficult feelings and emotions (Skeffington & Browne, 2014), and in this way offer the possibility of helping children to heal from the debilitating effects of abuse and violence (Malchiodi, 2015; Pretorius & Pfeifer, 2010). Additionally, creative activities may offer children opportunities and expressions

through which they can explore alternative ways of responding to life experiences (Camic, 2008, Vermetten, Kleber, & Van der Hart, 2012, p582).

In this paper, we introduce a therapeutic process called the Creative Arts in Psychotherapy (CAP) treatment, and describe a protocol that incorporates creative arts methods for treating trauma in children, aimed at enhancing children's psychological wellbeing and strengthening positive development. The CAP treatment was developed by the authors in response to the need for a semi-structured, low-resource, and culturally sensitive programme that can be implemented in the underprivileged communities and poor areas of South Africa. Evaluation of the programme is still ongoing, therefore this paper mainly focuses on describing the treatment characteristics and therapeutic processes, and we present some initial responses in the form of a case example as well as quotations obtained from interviews with the social workers facilitating the programme.

Rationale for Creative Arts in Psychotherapy (CAP) treatment

To provide a rationale for using creative arts within psychotherapy for child trauma victims, we propose a combination of three processes that can help in the facilitation of an improved psychological wellbeing and the development of relevant coping skills. The processes used in CAP include the benefits of group dynamics, empowerment through arts, and following a sequential approach to treatment. These processes will be discussed further below.

Benefits of group dynamics

“If you find empathy from your fellow members, then you feel like a person once again.”

– Social worker facilitating CAP treatment.

Many traumatic experiences involve interpersonal violence (e.g. rape, physical assault, domestic violence, emotional neglect, and torture) resulting in broken trust and suspicion towards relationships (Aspelmeier, Elliott, & Smith, 2007; Wright, Crawford, & Del Castillo, 2009). Group therapy can provide an opportunity to regain trust in others by modelling healthy relationship structures and rebuilding social techniques and connections (Betancourt et al., 2010; Herman, 1992; Killian & Brakarsh, 2004; Yalom & Leszcz, 2008). Traumatic experiences often result in feelings of alienation, loneliness and self-blame, and connecting with others within a safe space can help the children realize that they are not alone in their experiences and help reduce their sense of alien-

ation (Gallo-Lopez, 2000; Killian & Brakarsh, 2004; Yalom & Leszcz, 2008). Moreover, perceived social support has been related to a better recovery process and thus could be a helpful focus during treatment (Cluver, Fincham, & Seedat, 2009).

Creative arts activities may enrich group interaction and group dynamics, as they serve as a medium of communication through which support and exchange between group members can be reinforced (Malchiodi, 1998). Dance/movement can be a particularly helpful way to address relational issues, because moving in a shared space and embodied self-expressions witnessed by others stimulate group interaction (e.g. Ho, 2015). For instance, mirroring activities (where one person or the entire group follow the spontaneous movements initiated by an individual) are used to establish a sense of connection and understanding between two people. In visual art (such as drawing and painting), representations of a situation or emotions can be projected onto a surface outside the person, and images can be used to communicate concepts or feelings that can then be shared with one another, even those one might not know too well (e.g. Skeffington & Browne, 2014). Music in group settings can provide an opportunity to enhance the ability to communicate and build relationships with others through simultaneous interaction, listening and paying attention to others (e.g. Bensimon, Amir, & Wolf, 2008). Drama can offer a multisensory way to establish relationships by using both physical, kinaesthetic, auditory, and visual abilities of expression (e.g. Cassidy, Turnbull, & Gumley, 2014). For instance, through role play and mirroring a child can try out different roles and situations while playing at being someone else.

Empowerment through arts

“Kids can be healed more thoroughly if they have been given a platform to show their talents”

– Social worker facilitating CAP treatment.

Traumatic stress reactions are responses to an overwhelming experience that can result in difficulties in verbal expression (Perry, 2009). Therefore, arts can be used as an adjunct in trauma therapy, facilitating the expression of emotions and experiences. The body provides a pre-reflexive way of communication and interaction with the world: “The senses are the vehicles through which our histories are recorded. Consequently, memory is not exclusively verbal, nor is it restricted to the domain of the brain.” (Knill, Barba, & Fuchs, 1995, p. 45). Although evidence is limited, a number of researchers hypothesized that during the traumatic event, activity decreases in the left hemisphere of the brain, where the language and declarative memory is located, thereby diminishing verbal processing of the way it is stored in the brain (Glaser, 2000; Harris, 2009;

Klorer, 2005; Lanius et al., 2004). Alastair (2002) also found decreased activity in Broca's area in patients with PTSD, supporting the challenge of verbal expression after trauma. Siegel (2017) describes that trauma can impair integration of implicit memory, including perceptions, emotions and bodily sensations associated with the traumatic event, resulting in intrusion of those memories without experiencing it as something from the past. Integration into explicit memory is then an important part of resolving these memory intrusions, which can be achieved through for instance writing (Siegel, 2017) and drawing (Malchiodi, 2015). On a physiological level, Levine (2010) describes PTSD as a result of dysregulation of the 'flight or fight' response in the autonomic nervous system. In line with this theory, somatic, sensory and bodily expression and integration is needed for healing (see Lamers-Winkelman, 1997, Siegel, 2017, Van der Kolk, 2014).

The ability to act or have any sense of agency during a traumatic occurrence is exactly what is missing for trauma victims. This is emphasized in theoretical and conceptual perspectives stressing the need for control, mastery or self-efficacy (Bonanno, 2004; Kleber & Brom, 2003). By using arts in the therapeutic process, the opportunity is offered to the client to move out of the thinking mind, or stuck mode, into a realm where they can actually have an impact on what is happening, through the use of manipulable materials, by transforming an image into something else, or by employing symbolism as a kind of protective barrier against the actuality of what happened. Through physical activities such as dancing and drama, the child has an opportunity to re-orient and re-gain control over his or her own body, something that is especially important after sexual and physical abuse (Ho, 2015; Koch, Kunz, Lykou, & Cruz, 2014; Lamers-Winkelman, 1997). Incorporating physical activities relates to the way in which young children learn and communicate, using movement rather than language (Lamers-Winkelman, 1997). Although creative arts within psychotherapy do not avoid verbal expression, it helps verbalization through initial non-linguistic communication modes and sensory expression (Malchiodi, 2003). Where children seem unable to express certain aspects of their trauma verbally, these experiences can be explored through arts activities. The experience of being able to release and share this difficult material can be very empowering for a child. Each of the art disciplines works in its own particular way towards promoting awareness and growth. For instance, the creation of art can mediate reflection and personal exploration (Malchiodi, 2015; Skeffington & Browne, 2014), dance allows for experiencing emotions through physical expression (Ho, 2015; Koch, Kunz, Lykou, & Cruz, 2014), music can have a soothing capacity and reduce psychological stress (Jiang, Rickson, & Jiang, 2016; Malchiodi, 2015), and drama offers control and choice, and establishes safety (Cassidy, Turnbull, & Gumley, 2014). Through the careful and sensitive selection of different artistic modalities, the therapeutic session can be shaped.

A sequential approach

“Overall I can say the children moved from the point of being a victim to survivors.” – Social worker facilitating CAP treatment.

The general outline for the CAP treatment is based on the trauma treatment model that was formulated by Judith Herman (1992; see also Mooren & Stöf sel, 2014), and inspired by the modification of this model proposed by Malchiodi (2015) for use in an art and play group therapy protocol for children from violent homes. The model includes three phases: 1) establishing safety, 2) the trauma story, and 3) restoration of internal connection between traumatized individuals and their communities.

The first phase of trauma treatment includes establishing safety and stabilisation. Feelings of safety are crucial after a traumatic event, when assumptions of safety are violated. If children are feeling insecure and unsafe in the group, the children will not be able to disclose what happened or express how they feel, and thus benefit from the therapeutic process. The second phase of treatment involves activities that encourage the children to share their traumatic experiences in order to make sense of what happened and obtain a degree of control over the experience. By sharing the story, the aim is that the children regain their ability to experience and enjoy life whilst containing their traumatic memories within a particular space. The third and final phase of the trauma recovery model includes restoration of the connection between traumatized individuals and their communities. It focuses on preparing the children to go back to their normal lives, using specific activities that help increase self-esteem and coping strategies, and to regard the traumatic experience as a chapter in their life’s story. Although there is also criticism on the methodological limitations of studies supporting the need for phase-based treatment (De Jongh et al., 2016), it is regularly used in the treatment of patients with disorders caused by abuse and sexual violence and has been found effective among adult victims (Cloitre et al., 2010).

CAP treatment outline

The CAP treatment can be facilitated by any health care professional qualified to facilitate group therapy, and with an in-depth understanding of both traumatic stress and using creative arts in group therapy. The CAP treatment outline is presented below, and includes the target group, timing of the intervention, the therapeutic goals, the planning of the CAP treatment, and a description of all ten sessions (Table 1).

Target group

This treatment is aimed for children in the age of 8 to 12 years who have experienced a traumatic event. Traumatic exposure may include sexual abuse or assault, physical abuse or assault, emotional abuse, neglect, serious accident, domestic violence, community violence, school violence, or interpersonal violence. Children that display distress after experiencing such a traumatic event can join the programme.

Timing

The treatment can start any time between 1 month and 2 years after the traumatic event took place. When the child enters the trauma clinic and symptoms of distress are noticed, the child will be referred to therapy by intake workers or social workers, as well as by psychologists after a short screening.

Therapeutic goals

Within the proposed sequential approach, the following goals can be considered when implementing the CAP treatment per trauma treatment phase:

- Phase 1 (creating a safe space): An increased knowledge of the emotional effect of abuse
- Phase 2 (the trauma story): An improvement in identification and communication of emotions and a reduction in posttraumatic stress symptoms
- Phase 3 (returning to the community): An improvement in inter- and intrapersonal skills and resilience to cope with future crises and an increase in posttraumatic growth

Planning the CAP treatment

It is recommended that a group consists of six to eight participants. The programme is designed to meet ten 90-minute sessions. When planning the start of a new group, the facilitator must carefully select the participants based on the type of trauma, the severity of the trauma reactions and developmental level of the children. The sessions are structured and activities are directive in order to establish safety and containment, and to help the children move through all phases of the protocol successfully. Every session starts with a ten-minute check-in, has a ten-minute break halfway, and ends with a check-out. In between, 60 minutes are divided for two different activities before and after the break.

Whilst adhering to the structured outline of the CAP protocol, the facilitator at all times should rely on their professional judgement and be flexible to adjust to arising needs. When planning the treatment, in principle, everyone meeting inclusion criteria is eligible to participate. Yet, a contraindication for joining the group for instance would

be if a child is too aggressive or violent, due to the potential harm to others and disruption this may cause. In this case, an individual treatment may be a preferred approach. Also, it is possible that after completing the ten sessions of the CAP protocol, some children have remaining problems that could be addressed in follow-up treatment. One challenge of the group setting is that the individual children may move through the phases at a different pace and with different preferences of expression. At times, the facilitator could offer different modes of expression to meet a certain therapeutic goal, as long as the overall sequence of phased goals is followed.

Session breakdown

Phase 1: Creating a safe space

“I think that was a reality check for most of them to really understand that we are not here just to play, but to receive help and healing for what happened... And they were able to tell stories and relate to it. That is where they started to connect.”

– Social worker facilitating CAP treatment.

Session 1: Introduction

The aim of the first session is for children to get to know each other and to start creating trust and a safe space. It is also important to establish group rules; this can be done in a collaborative brainstorm resulting in the creation of a poster. The role of the facilitators is to suggest any important rules that are not being mentioned. Drumming as music activity can provide children with the opportunity to learn each other's names, increase a sense of togetherness and practise listening skills (Bensimon, Amir, & Wolf, 2008). In this exercise, everyone initially follows an easy rhythm. After a while, children take turns calling out their names, along with a chosen gesture or expression, after which the whole group repeats the name and the gesture. Drumming can draw a group together and it is an easy and fun activity that can motivate participation and allow for the expression of energy. As children follow the actions and names called out by others, they learn to listen and connect with one another. Furthermore, as each child hears the group reflecting their own name and gesture back to them it offers them a sense of belonging and validation. Another activity that can serve as an introduction is using an object blanket. All children bring a meaningful or special object to the first session. They take turns telling the story of the object as they place it on the blanket presenting themselves to the group. When everyone has shared their story/object, they can look at the scene they have created on the blanket and anyone can choose

to place their object somewhere else on the blanket, to refer to how they relate to the other objects/stories. These examples of activities are appropriate for a first session, as they do not require well-developed artistic or technical skills and are therefore non-threatening. At the same time, they all focus on group collaboration and connection.

Session 2: Psycho-education

The aims of the second session include psycho-education, identifying and normalizing feelings, practising relaxation, and opening-up communication. A bibliotherapy activity that is recommended is the reading of a story called 'A terrible thing happened' (Holmes, 2000), in which a racoon saw the most terrible thing happen and started having negative feelings until he went for therapy. Reading the story will allow the children to identify with a non-threatening character and engage in conversation to open up communication. Another activity that can be practised is scribbling to music, in which children listen to different types of recorded music and draw a series of scribbled lines on paper. Afterwards children can talk about what they created, and start exploring experiences, emotions and thoughts.

Session 3: Safe space

The goals of the third session are to enhance feelings of safety and self-control, and to practise self-soothing techniques. An activity that can be done to create a safe space includes a visualisation exercise, in which the children close their eyes and create an image in their minds of a space that feels safe and comfortable. Subsequently, a discussion can be held about different kinds of symbols such as personal and cultural symbols. The children are asked to think of a symbol that has got the power to protect them at bad times. They will be encouraged to find personal symbols specifically, and then helped to place their symbols within a cultural or global context. They then create this symbol in an arts activity. Another activity that can be done is mirrored dancing, in which one child will take the lead and the other children need to copy everything this child does, at the same pace just like he or she is a mirror. This can be done in pairs, or alternatively with the entire group. If the group struggles to stay together or to dance, a large sheet can be used; every child has to hold one side and move the sheet when it is their turn. This exercise aims to increase connection between group members, and when children's movements are mirrored they feel validated and affirmed.

Phase 2: The trauma story

"Everyone was given a platform ... I was glad that Zandile¹ was the one who first wanted to go. She had given the others an access to feel com-

fortable, and the others also came and then they were able to share, all of them.”

– Social worker facilitating CAP treatment.

Session 4: Emotion identification

The aim of the fourth session is to identify and validate feelings and improve emotional vocabulary. A music activity that can be done to help identifying feelings is to play different pieces of music and discuss what emotions they evoke. An addition to this is for one group member to express the feelings they relate to the music using musical instruments or facial or bodily expressions and for the group to guess what emotion they are expressing. A drama activity conducted in this session is called emotional drama, in which the children write a boring dialogue without any emotions followed by each actor choosing an emotion to act out their part of the script. The rest of the group is then required to guess the emotions. This exercise will aid identification of emotions and the development of emotional vocabulary.

Session 5: Emotion regulation

The aim of session five is to understand emotion regulation, and the difference between feelings of being powerful or powerless. An arts activity that can be done to help with development of self-concepts is making or decorating masks, to illustrate the concept of distinguishing between the inside (only noticeable for yourself) and the outside (how do others see you). A drama exercise can start by visualising a time the child felt powerless or helpless, and to think of what shapes or positions the body had, how did it feel in your body, and how did your body move. Then the visualisation moves to a time in which the child felt powerful and able to act as they wished. If the child cannot locate a memory of ever feeling powerful the children can act like animals, for instance a powerless animal such as a mouse, and a powerful animal such as a lion. What moves would their bodies do/make? How would they stand? What would be around them? What would it feel like? Music can be paired with this activity as well as sound, for example a powerful sound versus a timid sound.

Session 6: The trauma story

This session aims to provide opportunities for transformation through disclosure of every trauma story, and to give the traumatic experience a voice and place. Support is very important in this phase of treatment, and the facilitator provides a modelling role for how to be supportive to the other group members. The main activity will be around facilitating change of the sensory experience relating to the trauma, by drawing a picture about their experience. Containment in this session is crucial, to ensure that the children do not leave the therapy space feeling distressed. This can be done

for instance by engaging in another drawing that connects children to their resources, inner as well as outer, or to do a relaxation exercise blowing bubbles combined with saying words of hope, so that children leave with reminders of what is positive in their lives despite trauma they have faced.

Phase 3: Returning to the community

“We went with the music and they were given a platform to all come with their rhythms ...how do you feel to connect yourself with an existing rhythm... and the biggest thing was to show them that, you know what, despite what happened, you can still connect with others in life.”

– Social worker facilitating CAP treatment.

Session 7: Strength finder

The aim of session seven is to emphasize strengths and remind the children of their favourite things that they can use as a coping strategy. A drama activity that can be done is for instance the hero's play, in which the group is going to create their own story about a hero and then act it out. The framework of the hero's journey can be introduced to the children as an example of the story. Stage 1: Hero is in a comfortable place but feels bored/tired/is forced out, and then receives a call to move on (someone asks for help, has a dream, or has to move away from danger). Stage 2: The hero begins the journey, usually feeling powerful, content, excited/able to do what needs to be done. Stage 3: The hero meets a threat – some conflict or barrier/difficult situation/stressor that needs to be conquered – either by fighting the threat /running away/ by surrendering to it or making friends with it. Stage 4: The hero triumphs over the threat and receives gifts (learnings, wisdom) that can then be taken back home. Stage 5: The hero returns home with his/her gifts (Campbell, 1949). At the end a reflection exercise can emphasize the strengths that the hero has, and how that can relate to the children's own strengths in their lives. A second activity that can be done is listening to or singing the song of the sound of music 'my favourite things' linked to personal attributes. The children can create a collection of their favourite things, making them from clay or drawing them on paper.

Session 8: Community support

The aim of session eight is to emphasize group connection and support networks. Emphasizing group connection can be done via a music group. The group is divided into two. The one group together sets a consistent base pattern, like a slow drumbeat, over which the other group makes sounds with their mouths or instruments, one after the other, finding their voice in the group. After this, the roles are switched and

the second group supports the expression of the first group. Various sounds and/or songs can be experimented with. Depending on the groups' response, facilitators may need to take a strong role in directing rhythms or offering sounds. Another activity to emphasize support networks is by drawing hands on a paper, decorating them and writing names of people in every finger that can help the child in times of emergency. Individual drawings can be pasted on a large paper to make a community collage, emphasizing the community of safety and support they have established. The children can also rearrange the collage items in relation to how they feel connected to each one, as they did in the beginning session with the story blankets.

Session 9: Meaning making

Session nine aims to facilitate reflection on learning and acknowledgement of growth. It is also a preparation for saying goodbye in the next session. In order to reflect, the children can for instance fold a paper in three and make a collage about their past, their present, and their future. This collage will summarize where they came from, how they are feeling now, and where they see themselves in future, reminding them of different chapters to their life's story. Alternatively, they can fold the paper in four and reflect on the four seasons of life in a collage. Children can also be asked to name the things that touched them the most in the sessions; which images or stories (their own or from others) or activities will they remember or what stood out the most for them. Have them incorporate those images/things into their collages. Collages can be presented to the rest of the group. In order to make a memory and to enhance group cohesion, another activity is to create a booklet where every person in the group writes or draws an encouraging message to the recipient. This can serve as a reminder of their connections and peer support.

Session 10: Goodbye

The tenth and final session of the creative arts in psychotherapy treatment aims to facilitate saying goodbye, as well as leaving the children with hope and positive memories. A certificate ceremony can be held, in which the children are praised for their participation, courage and one or two special skills of each child are emphasized. Another closing activity can be to make and/or decorate a memory box in which children can place one or two central ideas they are going to take from the group. The box can contain the art works from the children they made during the ten sessions, and the gifts they received from their group members in session nine.

Table 1 Creative arts therapy programme session phase, themes and goals

Phase	Session		
	#	Theme	Goal
Creating a safe space	1	Introduction	Getting to know each other, creating trust and a safe space, setting group rules
	2	Psycho-education	Normalizing feelings, opening-up communication, practicing relaxation
	3	Safe space	Enhancing feelings of safety and self-control, practicing self-soothing and mindfulness
The trauma story	4	Emotion identification	Identifying and validating feelings, improving emotion vocabulary
	5	Emotion regulation	Understanding emotion regulation, and powerful and powerless emotions
	6	The trauma story	Providing transformation through disclosure, giving the trauma a voice and place
Returning to community	7	Strength finder	Emphasizing strengths and reminding of favorite things as coping strategy
	8	Community support	Emphasizing group connection and support networks
	9	Meaning making	Reflection on learning and emphasizing growth
	10	Goodbye	Saying goodbye to the group, leaving them with hope and positive memories

Case description

This article started with the case of the 12-year old boy Sibü who was a victim of rape. He attended the Creative Arts in Psychotherapy (CAP) programme in Johannesburg, South Africa². In therapy, Sibü appeared to be a mild mannered willing participant. In the beginning (phase 1), Sibü was easily distracted, he did not make much eye contact and did not interact much with the other children. He responded well to physical expressive activities, particularly drumming, where he became very enthusiastic and energized. With other activities such as drawing or reading the story of ‘a terrible thing happened’ (bibliotherapy), he was more restless and struggled to concentrate. Towards session three it became apparent that Sibü started feeling more comfortable in the group, as he actively approached other children; he smiled at his peers, made eye-contact and asked questions.

During phase 2, Sibü struggled at first to express his emotions. Taking into consideration Sibü’s background and developmental level, he was unable to adequately verbalize his emotions surrounding the trauma, and showed limited vocabulary. This was for instance indicated by him using the word ‘happy’ most of the times when asked

about his feelings. After session 6 he said: 'I feel happy because we told stories'. After drumming in session 7 he said: 'I feel happy because I like this song. It makes me feel better at angry times'. Observation notes from session 5 reported that 'he expressed himself during the drumming activity by enthusiastically taking the lead while making drum-beats'. The creative arts activities could accommodate a limited vocabulary and language barriers, providing a safe space and wide variety of tools for nonverbal expression.

During session 6, where the children were asked to share their trauma story, Sibü was less engaged and appeared distracted and distressed. Initially, he isolated himself from the group while working with art materials. He seemed frustrated, reflected by an unhappy expression on his face and an impatient attitude. The situation escalated when Sibü threw scissors. During the trauma storytelling, Sibü did not show clear emotions, but he listened carefully to the stories of the other children. As soon as the facilitator changed the activity into a more physical engagement using drums and dancing, Sibü's body language and mannerisms changed. He was more at ease with himself and could regulate his emotions better. The drums provided an opportunity to explore and express his feelings in an appropriate manner.

Towards the end of the therapy (phase 3), Sibü expressed more feelings without being prompted, indicating that he became more comfortable with the creative arts therapy process as well as having more trust in his peers. When reflecting on their future wishes, Sibü was proudly holding his painting in the air and told the group: 'I want to learn, I want to help people, to finish school and to be a soccer player'. During the final session, he concluded: "I'm happy because we were drawing, telling stories and talked about our feelings. And we were learning things we didn't know."

Discussion

Treating abused children in a culturally diverse setting is a challenging endeavor, especially in a country where abuse and violence are omnipresent experiences. Yet, it is essential that children who have been victimized, living in a setting further complicated by poverty and unemployment, receive sufficient and high quality health care. In this paper, we have proposed the creative arts in psychotherapy (CAP) treatment that can be offered to these children after experiencing a traumatic event. We expect that his protocol will fit the developmental needs of children, so they can express themselves in nonverbal, nonthreatening and playful ways. The treatment protocol strives to bring more uniformity in the management of child trauma in multicultural and under-resourced communities by combining a semi-structured trauma protocol

with creative arts therapy principles. Positive aspects of the protocol include its careful and detailed programme, consideration for the specific characteristics of the setting in which the children live and its connection with modern developments in trauma therapy. Nevertheless, there are limitations and pitfalls that need to be considered.

Group therapy as an initial treatment is a convenient choice in an impoverished context, due to the fact that more children can be helped simultaneously, saving costs and resources, and the peer-support within the group as a powerful source of healing, especially in a collectivistic culture where the emphasis is on group goals and activities (Triandis, 1995). Group treatment for PTSD is used frequently all over the world. Nevertheless, not much attention has been given to identifying evidence-based group treatments for this disorder, although we have to realize that group clinical trials are complex and expensive to conduct. Based on the existing research, it is unknown whether group therapy for a child with PTSD is reaching similar treatment outcomes compared to individual therapy, and studies including different population groups show that treatment outcomes of (adult) group therapy are ambiguous (Haagen, Smid, Knipscheer, & Kleber, 2015; Manassis et al, 2002; Sloan, Bovin, & Schnurr, 2012). It is possible that group treatments also have negative effects if the group is not managed well, and people are victimized or negative group pressure exists.

Generally, establishing an effective treatment protocol for children after trauma is challenging and there is no consent on what is internationally recognized as evidence-based health care. A critical review by Gillies, Taylor, Gray, O'Brien and D'Abrew (2012) showed that there is no clear evidence for the relative effectiveness of different psychological interventions for treating PTSD in children. The CAP protocol does not only focus on the traumatic experiences of the children, but rather addresses negative emotions and thoughts associated with the trauma, and aims to build coping skills and strengthen resilience, especially through interpersonal connections. The preferential use of trauma focused treatments (such as trauma-focused cognitive behavioural therapy (TFCBT) and EMDR) has become the centre of a debate among trauma specialists, with many researchers delivering empirical proof of its superiority above non-trauma focused therapies (such as non-trauma-focused CBT and psychodynamic therapy) (Bisson, Roberts, Andrew, Cooper, & Lewis, 2013). Indeed, in general trauma focused therapy has been found to be superior. However, some authors have demonstrated that PTSD psychotherapies can be equally efficacious in promoting recovery through non-treatment specific mechanisms, or placebo (-like) effects, such as treatment expectancies and therapeutic alliance (Wampold et al., 2010).

Another challenge refers to the possibility (or the lack of it) of implementing new treatments in low- and middle income countries and communities. As indicated in previous research, challenges may appear with availability and willingness of health care workers to engage in a 'new' type of treatment, mostly due to a high caseload and relative low numbers of workers trained and supervised in mental health care (Saraceno et al., 2007). A lack of training and continuous supervision of available health care workers is another limitation (Saraceno et al., 2007), and resistance from the community towards foreign interventions can occur (Jordans et al., 2013; Tol et al., 2014). Although this CAP programme tries to address some of these challenges reported in previous studies, for instance by providing additional training and continuous supervision to health care workers joining the programme and by selecting culturally sensitive activities in therapy, we realize implementation of it in low- and middle-income countries is not without resistance. That said, with such a high need for more and effective treatment opportunities for traumatized children specifically in this type of context, it is priority to continue to try and implement, evaluate, and improve evidence-based trauma practices like the CAP programme.

Evaluation of the CAP treatment is still ongoing, and although we received positive responses from the social workers and parents involved in the study, such as illustrated in the case study of Sibü and quotes in this paper, the effectiveness remains to be established. The advantage, however, that we see in introducing the CAP treatment is that it does avail itself to be included in RCT designs due to its structured protocol. This is a new addition in the field of creative therapy, since most creative therapies that take place do not follow a strict protocol, which complicates evaluation (e.g. Schouten, De Niet, Knipscheer, Kleber, & Hutschemaekers, 2014). Further research could clarify treatment efficacy in various cultural settings, whether there is a difference in treatment effectiveness between different types of trauma, and which symptoms are most likely to resolve during treatment.

Footnotes

¹Client names have been changed to protect confidentiality

²Information for this case study was derived from different sources: intake interviews, observations, progress notes from the social worker, a post-treatment interview and clinical scales administered pre- and post-treatment.

Acknowledgements:

The authors thank Charles Sathegke and Ndumiso Mdaka for their involvement in the pilot study and Maronja de Jongh for her contribution to the case study.

References

- Alastair, M. H. (2002). Neuroimaging findings post-traumatic stress disorder: Systematic review. *British Journal of Psychiatry*, *181*, 102-110. doi: 10.1192/bjp.181.2.102
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
- Aspelmeier, J. E., Elliott, A. N., & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse & Neglect*, *31*(5), 549-566. doi:10.1016/j.chiabu.2006.12.002
- Beauregard, C. (2014). Effects of classroom-based creative expression programmes on children's well-being. *The Arts in Psychotherapy*, *41*(3), 269-277. doi:10.1016/j.aip.2014.04.003
- Bandawe, C. R. (2005). Psychology brewed in an African pot: Indigenous philosophies and the quest for relevance. *Higher Education Policy*, *18*(3), 289-300. doi:10.1057/palgrave.hep.8300091
- Beck, A. T., & Haigh, E. A. P. (2014). Advances in Cognitive Theory and Therapy: The Generic Cognitive Mode. *Annual Review of Clinical Psychology*, *10*(1), 1-24. doi:10.1146/annurev-clinpsy-032813-153734
- Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. *The Arts in Psychotherapy*, *35*(1), 34-48. doi:10.1016/j.aip.2007.09.002
- Betancourt, T. S., Borisova, I. I., Williams, T. P., Brennan, R. T., Whitfield, T. H., De La Soudiere, M., ... Gilman, S. E. (2010). Sierra Leone's Former Child Soldiers: A Follow-Up Study of Psychosocial Adjustment and Community Reintegration. *Child Development*, *81*, 1077-1095. doi:10.1111/j.1467-8624.2010.01455.x
- Bisson, J. I., Roberts, N. P., Andrew, M., Cooper, R., & Lewis, C. (2013). Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. *Cochrane Database of Systematic Reviews*, *12*, 1-241. doi:10.1002/14651858.CD003388.pub4.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, *59*(1), 20-28. doi:10.1037/0003-066x.59.1.20
- Camic, P. M. (2008). Playing in the mud: Health psychology, the arts and creative approaches to health care. *Journal of Health Psychology*, *13*(2), 287-298. doi:10.1177/1359105307086698
- Campbell, J. (1949). *The Hero with a Thousand Phases*. Princeton, NJ: Princeton University.
- Campbell-Hall, V., Petersen, I., Bhana, A., Mjadu, S., Hosegood, V., & Flisher, A. J. (2010). Collaboration between traditional practitioners and primary health care staff in South Africa: Developing a workable partnership for community mental health services. *Transcultural Psychiatry*, *47*(4), 610-628. doi:10.1177/136346151038345
- Cassidy, S., Turnbull, S., & Gumley, A. (2014). Exploring core processes facilitating therapeutic change in Dramatherapy: A grounded theory analysis of published case studies. *The Arts in Psychotherapy*, *41*(4), 353-365. doi:10.1016/j.aip.2014.07.003
- Cloitre, M., Stovall-McClough, K. C., Noonan, K., Zorbass, P., Cherry, S., Jackson, C. L., ... Petkova, E. (2010). Treatment for PTSD related to childhood abuse: a randomized controlled trial. *American Journal of Psychiatry*, *167*, 915-924. doi:10.1176/appi.ajp.2010.09081247

- Cluver, L., Fincham, D. S. & Seedat, S. (2009). Posttraumatic stress in AIDS-orphaned children exposed to high levels of trauma: The protective role of perceived social support. *Journal of Traumatic Stress, 22*(2), 106-112. doi:10.1002/jts.20396
- De Jongh, A., Resick, P. A., Zoellner, L. A., van Minnen, A., Lee, C. W., Monson, C. M., ... Bicanic, I. A. E. (2016). Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depression and Anxiety, 1*-11. doi:10.1002/da.22469
- Gallo-Lopez, L. (2000). A creative play therapy approach to the group treatment of young sexually abused children. In H.G. Kaduson, & C.E. Schaefer (Eds.), *Short-term play therapy for children* (2nd ed.). New York, NY: Guildford Press.
- Gillies, D., Taylor, F., Gray, C., O'Brien, L., & D'Abrew, N. (2012). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents. *The Cochrane Database of systematic reviews, 12*. doi:10.1002/14651858.CD006726.pub2.
- Glaser, D. (2000). Child abuse and neglect and the brain: A review. *Journal of Child Psychology and Psychiatry, 41*(1), 99–116. doi:10.1017/s0021963099004990
- Gleaveanu, V. P. (2010). Creativity as cultural participation. *Journal for the Theory of Social Behaviour, 41*(1), 48-67. doi:10.1111/j.1468-5914.2010.00445.x
- Haagen, J. F. G., Smid, G. E., Knipscheer, J. W., & Kleber, R. J. (2015). The efficacy of recommended treatments for veterans with PTSD: A metaregression analysis. *Clinical Psychology Review, 40*, 184-194. doi:10.1016/j.cpr.2015.06.008
- Hall, K., & Sambu, W. (2014). Income poverty, unemployment, and social grants. In S. Mathews, L. Jamieson, L. Lake, & C. Smith (Eds.), *South African Child Gauge 2014* (pp. 94-98). Cape Town, South Africa: Children's Institute, University of Cape Town.
- Harris, D. A. (2009). The paradox of expressing speechless terror: Ritual liminality in the creative arts therapies' treatment of posttraumatic distress. *The Arts in Psychotherapy, 36*(2), 94–104. doi:10.1016/j.aip.2009.01.006
- Herman, J. L. (1992). *Trauma and Recovery: The Aftermath of Violence – from Domestic Abuse to Political Terror*. New York, NY: Basic Books.
- Ho, R. T. H. (2015). A place and space to survive: A dance/movement therapy program for childhood sexual abuse survivors. *The Arts in Psychotherapy, 46*, 9-16. doi:10.1016/j.aip.2015.09.004
- Holmes, M. M. (2000). *A terrible thing happened*. Washington, DC: Magination Press.
- Jiang, J., Rickson, D., & Jiang, C. (2016). The mechanism of music for reducing psychological stress: Music preference as a mediator. *The Arts in Psychotherapy, 48*, 62–68. doi:10.1016/j.aip.2016.02.002
- Jordans, M. J., Tol, W. A., Susanty, D., Ntamatumba, P., Luitel, N. P., Komproe, I. H., & de Jong, J. T. (2013). Implementation of a mental health care package for children in areas of armed conflict: a case study from Burundi, Indonesia, Nepal, Sri Lanka, and Sudan. *PLoS Med, 10*(1), e1001371. doi:10.1371/journal.pmed.1001371
- Killian, B., & Brakarsh, J. (2004). Therapeutic approaches to sexually abused children. In L. Richter, A. Dawes, & C. Higson-Smith (Eds.), *Sexual abuse of young children in Southern Africa* (pp. 367-394). Cape Town, South Africa: HSRC Press.

- Kleber, R. J., & Brom, D. (2003). *Coping with trauma, theory, prevention and treatment*. Lisse, The Netherlands: Swets & Zeitlinger.
- Klorer, P. G. (2005). Expressive therapy with severely maltreated children: Neuroscience contributions. *Art therapy, 22*(4), 213-220. doi:10.1080/07421656.2005.10129523
- Knill, P. J., Barba, H. N., & Fuchs, M. N. (1995). *Minstrels of soul: intermodal expressive therapy*. Toronto, Canada: Palmerston.
- Koch, S., Kunz, T., Lykou, S., & Cruz, R. (2014). Effects of dance movement therapy and dance on health-related psychological outcomes: A meta-analysis. *The Arts in Psychotherapy, 41*(1), 46-64. doi:10.1016/j.aip.2013.10.004
- Lamers-Winkelmann, F. (1997). Recognition and treatment of sexually abused children. In A. Vermeer, R. J. Bosscher, & G. D. Broadhead (Eds.). *Movement therapy across the lifespan* (pp. 107-115). Amsterdam, The Netherlands: VU University.
- Lanius, R. A., Williamson, P. C., Densmore, M., Boksman, K., Neufeld, R. W., Gati, J. S., & Menon, R. S. (2004). The nature of traumatic memories: A 4-T fMRI functional connectivity analysis. *American Journal of Psychiatry, 161*(1), 36-44. doi:10.1176/appi.ajp.161.1.36
- Levine, P. A. (2010). *In an unspoken voice: How the body releases trauma and restores goodness*. Berkeley, CA: North Atlantic Books.
- Malchiodi, C. A. (1998). *The art therapy sourcebook*. New York, NY: McGraw Hill.
- Malchiodi, C. A. (2003). *Handbook of art therapy*. New York, NY: Guilford.
- Malchiodi, C. A. (2015). *Creative interventions with traumatized children*. New York, NY: Guilford.
- Manassis, K., Mendlowitz, S. L., Scapillato, D., Avery, D., Fiksenbaum, L., Freire, M., ... Owens, M. (2002). Group and individual cognitive-behavioral therapy for childhood anxiety disorders: A randomized trial. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*(12), 1423-1430. doi:10.1097/00004583-200212000-00013
- Mooren, T., & Stöfösel, M. (2014). *Diagnosing and treating complex trauma*. East Sussex, NY: Routledge.
- Optimus Study (2016). *Sexual victimisation of children in South Africa Final report of the Optimus Foundation Study: South Africa*. Zurich, Switzerland: UBS Optimus Foundation.
- Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical psychology review, 29*(4), 328-338. doi:10.1016/j.cpr.2009.02.007
- Perry, B. D. (2009). Examining child maltreatment through a neurodevelopmental lens: Clinical applications of the neurosequential model of therapeutics. *Journal of Loss and Trauma: International Perspectives on Stress & Coping, 14*(4), 240-255. doi:10.1080/15325020903004350
- Pretorius, G. & Pfeifer, N. (2010). Group art therapy with sexually abused girls. *South African Journal of Psychology, 40*(1), 63-73. doi:10.1177/008124631004000107
- Quinlan, R., Schweitzer, R. D., Khawaja, N., & Griffin, J. (2016). Evaluation of a school based creative arts therapy program for adolescents from refugee backgrounds. *The Arts in Psychotherapy, 47*, 72-78. doi:10.1016/j.aip.2015.09.006

- Saraceno, B., van Ommeren, M., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., ... Underhill, C. (2007). Barriers to improvement of mental health services in low income and middle-income countries. *The Lancet*, *370*(9593), 1164-1174. doi:10.1016/s0140-6736(07)61263-x
- Schouten K. A., De Niet G. J., Knipscheer J. W., Kleber R. J., & Hutschemaekers G. J. M. (2014). The effectiveness of art therapy in the treatment of traumatized adults: A systematic review on art therapy and trauma. *Trauma, Violence and Abuse*. *16*(2), 220-228. doi:10.1177/1524838014555032
- Seedat, M., van Niekerk, A., Jewkes, R., Suffla, S., & Ratele, K. (2009). Violence and injuries in South Africa: prioritising an agenda for prevention. *Lancet*, *374*, 1011-1022. doi:10.1016/s0140-6736(09)60948-x
- Siegel, D. J. (2017). *Mind: a journey to the heart of being human*. New York, NY: W. W. Norton.
- Skeffington, P. M., & Browne, M. (2014). Art therapy, trauma and substance misuse: Using imagery to explore a difficult past with a complex client. *International Journal of Art Therapy*, *19*(3), 114-121. doi:10.1080/17454832.2014.910816
- Slayton, S. C., D'Archer, J., & Kaplan, F. (2010). Outcome Studies on the Efficacy of Art Therapy: A Review of Findings. *Art Therapy*, *27*(3), 108-118. doi:10.1080/07421656.2010.10129660
- Sloan, D. M., Bovin, M. J., & Schnurr, P. P. (2012). Review of group treatment for PTSD. *Journal of Rehabilitation Research & Development*, *49*(5), 689-702. doi:10.1682/jrrd.2011.07.0123
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, *15*(1), 1-18. doi:10.1207/s15327965pli1501_01
- Tol, W. A., Barbui, C., Bisson, J., Cohen, J., Hijazi, Z., Jones, L., ... Silove, D. (2014). World health organization guidelines for management of acute stress, PTSD, and bereavement: Key challenges on the road ahead. *PLoS Med*, *11*(12), e1001769. doi:10.1371/journal.pmed.1001769
- Triandis, H.C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Van der Kolk, B. A. (2005). Developmental Trauma Disorder. *Psychiatric Annals*, *35*(5), 401-408.
- Van der Kolk, B. (2014). *The body keeps the score*. New York, NY: Viking.
- Van Westrhenen, N., & Fritz, E. (2014). Creative Arts Therapy as treatment for child trauma: An overview. *The Arts in Psychotherapy*, *41*(5), 527-534. doi:10.1016/j.aip.2014.10.004
- Vermetten, E., Kleber, R. J., & Hart, O. V. (2012). *Handboek Posttraumatische stressstoornissen*. Utrecht, the Netherlands: De Tijdstroom.
- Wampold, B. E., Imel, Z. E., Laska, K. M., Benish, S., Miller, S. D., Flückiger, C., ... Budge, S. (2010). Determining what works in the treatment of PTSD. *Clinical Psychology Review*, *30*, 923-933. doi:10.1002/jclp.20683
- Williams, S. L., Williams, D. R., Stein, D. J., Seedat, S., Jackson, P. B., & Moomal, H. (2007). Multiple traumatic events and psychological distress: The South Africa stress and health study. *Journal of traumatic stress*, *20*(5), 845-855. doi:10.1002/jts.20252
- Wright, M. O., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse & Neglect*, *33*(1), 59-68. doi:10.1016/j.chiabu.2008.12.007
- Yalom, I. D., & Leszcz, M. (2008). *The Theory and Practice of Group Psychotherapy*. New York, NY: Basic Books.

The background is a complex abstract artwork. It features a central, dark, somewhat circular shape that resembles a head or a torso, rendered in shades of black and dark grey. This central figure is surrounded by a variety of colors and textures, including bright yellow, orange, red, green, and blue. The overall style is expressive and textured, with visible brushstrokes and layered colors. The composition is dense and layered, with the central figure appearing to emerge from a field of vibrant, somewhat chaotic colors.

7

Suitability of a community-based creative arts therapy intervention for abused children in South Africa

Nadine van Westrhenen
Elzette Fritz
Adri Vermeer
Rolf Kleber

Submitted

Acknowledgment of author contributions:
Data collection: N van Westrhenen & E Fritz,
Paper writing: N van Westrhenen, E Fritz, A Vermeer & R Kleber

Abstract

This article reports on the suitability of implementing a trauma-focused creative arts therapy intervention for severely abused children in South Africa. The study aimed to explore implementation processes and outcomes associated with the delivery of this therapy. The intervention was implemented in a child trauma clinic situated within communities in and around Johannesburg, South Africa. The challenges of implementing and evaluating a new intervention programme within routine clinical practise in a developing context have been significant. We outlined three major challenges referring to high dropout rates, the lack of facilitator's skills and commitment, and the suitability of the evaluation methods used. Finally, we discuss how these challenges can inform us about the suitability of community-based and trauma-focused treatment in a developing context and make recommendations based on pivotal lessons learned.

Key words: creative arts therapy, child abuse, maltreatment, South Africa, suitability study.

Introduction

Child maltreatment

South Africa has been referred to as a 'natural laboratory' (Kaminer & Eagle, 2010) where the impact of traumatic events and their consequences can be studied. Interpersonal violence rates are extremely high, with rates of death caused by interpersonal violence being four and a half times the global average (Seedat, van Niekerk, Jewkes, Suffla, & Ratele, 2009). Especially violence against women and children is prominent; the rate of homicide of women by intimate partners is six times the global average, and it has been reported that up to 39% of girls have undergone some form of sexual violence before the age of 18 (Seedat et al., 2009).

Child maltreatment includes all forms of physical abuse, sexual abuse, neglect and negligent treatment, emotional abuse, as well as exploitation that results in actual or potential harm to the child's health, development or dignity (WHO, 2015). Child sexual abuse prevalence rates have been reported in South Africa between 26% and 54% (Carey, Walker, Rossouw, Seedat, & Stein, 2007; Madu, 2003; Madu & Peltzer, 2000). Moreover, a study among rural South African youth reported physical abuse rates of 89.3% for women and 94.4% for men, emotional abuse rates of 54.7% (women) and 56.4% (men) and emotional neglect at 41.6% for women and 39.6% for men (Jewkes, Dunkle, Nduna, Jama, & Puren, 2010).

Child abuse increases the risk of HIV, sexually transmitted infections and unwanted pregnancies (Garwood, Gerassi, Jonson-Reid, Plax, & Drake, 2015; Jewkes, Dunkle, Nduna, Jama, & Puren, 2010), as well as delinquency and substance abuse (Jewkes et al., 2006), and common mental disorders such as posttraumatic stress disorder, depression and suicide (Fincham, Altes, Stein, & Seedat, 2009; Jewkes et al., 2010; Suliman et al., 2009). Exposure to violence and neglect in childhood can also have severe consequences for later abuse. For instance, girls exposed to sexual abuse are at increased risk of physical and/or sexual violence later in life and adult sexual assault (Dunkle et al., 2004), and boys who have been abused in childhood are at increased risk of later becoming perpetrators, resulting in an intergenerational cycle of violence (Jewkes et al., 2006; Seedat et al., 2009).

The consequences of child maltreatment are a serious public health concern. It is a cross-disciplinary challenge that impacts on all different levels of society (Mathews & Collin-Vézina, 2016), including public health, social justice, gender equality, human rights (Reading et al., 2009), as well as the economy (Fang, Brown, Florence, & Mercy,

2012). All these facts stress the importance and urgency of sufficient intervention programmes for children after abuse.

Therapy after child abuse

Current resources in South Africa are insufficient to take care of the extreme high number of victims of child maltreatment. Moreover, most psychological treatments are based on Western health care models developed in first world countries that are not only expensive and thus inaccessible for disadvantaged communities, but also foreign and disconnected to indigenous and more multicultural societies and traditions. Although studies on evidence-based interventions for children after trauma are well documented in scientific literature (Gillies, Taylor, Gray, O'Brien, & D'Abrew, 2013), most interventions are based on Western health care principles, and have only been tested in high-income countries.

As Tol and colleagues (2011) pointed out in a review study, there is a serious gap between research and practise when it comes to interventions in low and middle income countries, with the most commonly used interventions (e.g. counselling and community-based support programmes) having the least rigorous research and evidence. In order to address this gap, we designed, implemented and evaluated an intervention programme for seriously maltreated children in South Africa. The creative arts therapy programme is a structured, 10-session group based 'first aid' therapy for children after trauma, integrating creative cultural practises common in traditional South African communities such as music, dance and storytelling with scientific principles of psychotherapy and counselling. In the course of this project, however, we came to struggle with various dilemma's, such as barriers to accessibility, language and cultural barriers, managing high volumes of clients, and empowering semi-skilled professionals. The challenges in this project turned out to be substantial, therefore, the aim of this report is to discuss the challenges experienced and lessons learned, in the hope that this knowledge will be helpful to others facing similar challenges.

Context

At the start of the project, a partnership was established between a specific trauma clinic and the researcher. A team of social workers, staff members, and researchers was involved in the project after approval by the board of the trauma clinic. Funding for the project was raised through crowdfunding initiatives, although costs were aimed to remain low in order to enhance sustainability in a low-resource context with a lack of funding. The first step of the project was to assess needs through qualitative research. This phase included interviews with local social workers while the researcher worked in the clinic for a year in order to assess the possibilities for implementing the

programme. In the second step, the creative arts therapy intervention protocol was developed in collaboration with local psychologists and creative art therapists (van Westrhenen, Fritz, Oosthuizen, Lemont, Vermeer, & Kleber, 2017). Subsequently training and supervision was organized for the social workers of the clinic, so they could be equipped to facilitate the creative arts therapy intervention. In total, four social workers were trained in the first year, and due to high staff turnover, training was repeated annually. In the final step, abused children attending the clinic in the age between 8 and 12 years were referred to the programme. Parents and children were provided information on the programme, and social workers facilitated different therapy groups in a well-established trauma clinic situated within communities in and around Johannesburg, South Africa. Constant monitoring and evaluation was an integral part of the project, allowing for continuous improvement and development of the programme.

Challenges

Based on systematic documentation of information and experiences of all researchers and social workers involved, three major challenges were identified in the data regarding implementation of the programme: recruitment and retention, facilitator's skills and commitment, and evaluation design. These challenges will be explained further below.

Challenge 1: Recruitment and Retention

The first major challenge encountered was the difficulty to acquire enough respondents for our study. Although abuse and neglect are frequent events in South Africa and although the clinic (located in Johannesburg, a city with approximately 5 million inhabitants) received many maltreated children, there was a high dropout rate; from the 75 children referred to the project over two years, 58.7% dropped out during the course of the programme, in both the experimental group receiving creative arts therapy as well as the control group receiving a low-level supportive programme without treatment. Furthermore, more than 50% of the children in the experimental group only attended one or two sessions out of the prescribed ten, resulting in three out of the six therapy groups being terminated prematurely due to low and inconsistent turnout. Another constraint was that parents and children that did show up could easily be one to two hours early or late, complicating adherence to session routines and structure that the creative arts therapy intervention protocol prescribes.

The high dropout results were obtained despite the fact that the clinic in which the therapy was run was located within the communities, the services were provided free of charge, and where possible transport or transport money was provided to the

families. Also, in an attempt to facilitate commitment, information was provided to the participating families beforehand in their home language, parents signed consent indicating commitment, weekly reminders were sent to the parents via SMS, and food and beverages were regularly made available in the sessions.

Challenge 2: Facilitators' skills and commitment

A second challenge included the wide variety in skill levels, professionalism and commitment of the facilitators; some social workers were highly involved, dedicated, and collaborated with the researchers, others were overwhelmed by their workload, disorganized or even resentful. There were instances of problematic administration; the client files contained missing or inaccurate information, resulting in incorrect referrals of children who did not meet the therapy inclusion criteria, and therapy progress notes that went missing. There were challenges with punctuality; facilitators did not always adhere to the creative arts therapy manual, changed activities, changed session times and structures, or cancelled sessions last-minute, impacting on routine and retention. Another concern was the elevated levels of resentment and frustration amongst a part of the clinic staff towards the project, resulting in a breakdown in communication.

Although a major aim of the research was to benefit the clinic directly, social workers at times perceived that it was the researchers who were going to gain the most from the collaboration. Also, some managers at the clinic did not allow sufficient time to the social workers for the project, adding pressure to the already high caseload and working in a minimally paid capacity. We noticed that when the social workers facilitated the groups a number of times and they experienced the benefits of the therapy, they started feeling more confident in their own abilities, and they were more likely to maintain their positive contributions in the programme. Lastly, the staff turnover at the clinic was high, in the first year 50% of those that were trained and supervised in creative arts therapy protocol left the clinic, the second year this was 66%. Due to this very high staff turnover, investments in terms of training and supervision that were made only lasted shortly, and training and supervision had to be repeated.

Challenge 3: Evaluation design

The researchers experienced challenges in the evaluation of the creative arts therapy programme. Attendance was low and inconsistent, and due to the low literacy rates and language barriers, understanding of questionnaires was problematic. It was noticed that the young participants struggled to understand the Likert scales, and the attention span for children as well as the parents was relatively short. When working with orphans it was at times hard to find someone who could report on the emotional and behavioural history of the child, due to high staff turnover at orphanages. In response

to the challenges, further translation in the various South African languages were made available. Moreover, visual cues were introduced to indicate the Likert-scale answers options of the questionnaires.

Even considering these adaptations, reliability of the questionnaires in this context remained questionable. The parents reported in interviews and informal conversations that they noticed improvement in the child's behaviour at home, for instance they showed less aggressive behaviour (e.g. less fighting with other children), they played more with other children and they reported less nightmares. This positive change, however, could not be replicated in analysis of the questionnaires.

Discussion

Previous studies outlined the urgent need for more community based trauma interventions and evidence-based studies in developing countries (Tol et al., 2011). Although the implemented creative arts therapy intervention aimed to respond to this need whilst addressing previously reported barriers by following specific recommendations, such as decentralization of services, capacity-building through training, and incorporating a culturally congruent and low-cost approach (Saraceno et al., 2007; Tol et al., 2011, 2014), integration of the programme into routine practise in South Africa encountered significant challenges. Below we will discuss suitability of the intervention programme by reflecting on the challenges experienced.

Exploring barriers to access to treatment

Several reasons for the problems with recruitment and retention in this study can be distinguished. Perhaps the clinic was not as decentralized or well-established in the community as initially thought, as turnout reflected little interest in or accessibility to the psychological services offered. One explanation for this could be rather practical, although services were free of charge, parents reported not being able to pay for transport to travel to and from the clinic. However, because transport costs for some groups were fully funded and still attrition was high, it was unlikely that this was the main reason for non-attendance. Yet, in order to decrease barriers to access of mental health care, providing clinical services inside schools, churches, or other well-established organisations within the community could possibly help improve accessibility.

Moreover, problems with accessibility may be strongly influenced by a mismatch between the offered services and the acceptability of services based on health literacy and cultural norms and values. Traditional explanatory models of health in South Africa often refer to spiritual causes of ill health such as ancestors, for which patients

seek the help of a traditional healer instead of a medical professional (Crawford & Lipsedge, 2004; Meissner, 2004). It is not uncommon that traditional communities favour existing (more traditional) practises over new interventions, as they are more in line with cultural beliefs and traditions about ill health and how it should be treated (Jordans et al., 2013; Tol et al., 2014).

The history of South Africa, and in particular the consequences of Apartheid, as well as the unequal divide of socio-economic resources play a huge role in mental health care behaviour in South Africa (Sorsdahl et al., 2009). During Apartheid, accessibility of mental health care was limited for the non-white population, and therefore mental health is often still associated with something only for white people. Furthermore, the unequal divide of socio-economic resources causes a lot of people in South Africa to live in extreme poverty.

Poor health is usually associated with low income and poverty, not only in developing countries (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003). The relationship between socio-economic status and wellbeing is influenced by locus of control, or the subjective sense of control over particular life circumstances (Marmot, 2004). People with a low socio-economic status in the society who have a low sense of control may be less likely to seek help from health care professionals, or see the benefits of such help, compared to those who have a higher status. Additionally, the stigma around mental health illnesses and HIV/AIDS (an overwhelming problem in South Africa) of which the child is at risk after sexual abuse, also effecting help-seeking behaviour (Jewkes, 2006; Kalichman et al., 2005).

The difficulty to reach patients and the dropout of mental health treatment are well-known issues in cross-cultural studies (Bruwer et al., 2011; Seedat et al., 2009a). They are considered serious and difficult to handle problems, especially among people who have low income, lack insurance, are from different ethnic backgrounds and have negative or ambivalent attitudes towards mental health care. Specific interventions targeting these groups are needed to increase the proportion of patients who complete an adequate course of treatment. Moreover, considering the complexity and cross-disciplinary (e.g. anthropology, economy, law, psychiatry, psychology, sociology) nature of these challenges, we recommend interdisciplinary research initiatives working on scientific and clinical practice issues related to child maltreatment (Freyd et al., 2005) and community-based mental health interventions.

Improving practitioner's practice

The lack of commitment by some of the social workers could be attributed to their high caseload, in combination with a lack of training, supervision and management. It is considered a key barrier in low- and middle income countries that health care workers are generally overburdened with multiple tasks and patient loads (Saraceno et al., 2007), and even though the group approach in the creative arts therapy protocol was aimed to address this barrier (by enabling to help more people at once), the initial buy-in and commitment from the clinic staff was lacking to make it work. Furthermore, this lack of commitment is a rather frequently occurring problem in cross-cultural research (Knipscheer & Kleber, 2005; Van de Vijver & Leung, 1997). Researchers are often confronted with suspicion and reluctance.

In order to implement successful interventions in this context, the health care workers executing them require more organisational leadership support, for instance when specialist staff can primarily take on the role of managers and supervisors (Saraceno et al., 2007), and social workers are supported and receive continuous professional development. Involvement of different people from different levels in the organization and community, such as is the case in participatory action research, can help project commitment and possibly reduce cultural and attitudinal barriers between researchers, staff, and clients (Saraceno et al., 2007). We also learned that success was related to the social workers' feelings of self-efficacy (Bandura, 1977), experience in facilitating groups, and hours of training and supervision.

Ethical considerations for community-based research in a developing context

The selected instruments for this study were used before in previous studies in comparable settings in South Africa, and reliability and validity measures were published. Based on our experiences with the administration of these questionnaires, we were surprised not to find any previous comments on the limitations and problems concerning this procedure. Although it is quite common to use standardized questionnaires developed in the western world in non-western settings, there is serious doubt about their validity in settings that are different and that are characterized by abuse and poverty (Bolton, 2001). The interplay between qualitative and quantitative forms of research should be utilized better, more systematic and more thoroughly. We therefore recommend that future research in a multicultural context should consist of a mixed design to ensure cultural validity (Boeije, Slagt, & van Wesel, 2013), including methods such as clinical interviews, focus groups, semi-structured interviews, and observations, in combination with developing and administering cross-culturally validated questionnaires.

Furthermore, the effectiveness of trauma-focused treatment in a context of ongoing adversity, such as in the case of chronic poverty, community violence and war, has been questioned. Psychological treatments are not always effective when someone experiences ongoing stress and trauma (Nickerson, Bryant, Silove, & Steel, 2011; Tol et al., 2014a). It can be debated whether psychosocial problems such as poverty and malnutrition or rather trauma-focused treatment are preferred approaches when trying to understand and address mental health needs in such settings (Miller & Rasmussen, 2010). Daily stressors have substantial impact on mental health outcomes (i.e. Miller, Omidan, Rasmussen, Yaqubi, & Daudzai, 2008; Rasmussen et al., 2010), yet interventions that exclusively target these daily stressors risk overlooking the need for more specialized trauma treatment.

Ethical dilemmas such as these, in which ‘moral obligations demand or appear to demand that a person adopt each of two (or more) alternative actions, yet the person cannot perform all the required alternatives’ (Beauchamp and Childress, 2001; p.10), increase the risk of compromising the reliability and validity of a research study. Although in our study the main aim was to provide trauma-focused treatment, we were concerned about the physical health of the children when they were continuously reporting being hungry and therefore struggled to concentrate on the therapeutic activities. We quickly realized that it was impossible to treat the traumatic stress symptoms in isolation of psychosocial challenges, but struggled to find the right balance between trauma-treatment and psychosocial support, in our capacity as psychologists and researchers.

Considering these complex situations in which researchers in a developing context find themselves, we find merit in using an ethical problem solving model for research with at-risk population groups in developing countries. Such as model could provide a framework to examine complex situations considering multi parties interests’, using a systemic multi-step approach to guide decision making. Using a foundation such as the ethical decision making model by Koocher and Keith-Spiegel (2008), research can be conducted into developing such a framework.

Finally

We did learn more about the challenges research in low and middle income countries, particularly South Africa, is facing, and we hope that our insights can guide and stimulate similar studies into how we can best support the high numbers of abused children in developing countries. We specifically experienced challenges around recruitment and retention, facilitators’ skills and commitment, and the evaluation design. We

recommend further research on help-seeking behaviour in impoverished and multicultural communities, and the close collaboration between researchers, health care professionals, also including patients/clients from the communities in decision making and implementation of new treatment protocols. Due to the multi-faceted nature of the problem of child maltreatment, different interdisciplinary pools of knowledge are required to effectively address the problem. Increasing training and supervision of qualified health care professionals and the inclusion of more mixed research designs are possible strategies to improve evidence-based trauma-care for the large number of traumatized children who need psychological help. Lastly, we acknowledged the ethical dilemmas researchers may face between providing trauma-focused and psychosocial support in a context of ongoing stress and trauma, and we recommend the development of an ethical problem-solving model to guide decision making.

References

- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioural change. *Psychological review*, *84*(2), 191-215. doi:10.1037/0033-295x.84.2.191
- Beauchamp, T., & Childress, J. (2001). *Principles of biomedical ethics (5th ed.)*. New York, NY: Oxford University Press.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public health reports*, *118*(4), 293-302. doi:10.1016/s0033-3549(04)50253-4
- Boeije, H., Slagt, M., & van Wesel, F. (2013). The contribution of mixed methods research to the field of childhood trauma: A narrative review focused on data integration. *Journal of Mixed Methods Research*, *7*(4), 347-369. doi:10.1177/1558689813482756
- Bolton, P. (2001). Cross-cultural validity and reliability testing of a standard psychiatric assessment instrument without a Gold Standard. *Journal of Nervous & Mental Disease*, *189*, 238-242. doi:10.1097/00005053-200104000-00005
- Bruwer, B., Sorsdahl, K., Harrison, J., Stein, D. J., Williams, D., & Seedat, S. (2011). Barriers to mental health care and predictors of treatment dropout in the South African Stress and Health Study. *Psychiatric Services*, *62*(7), 774-781. doi:10.1176/ps.62.7.pss6207_0774
- Carey, P., Walker, J. L., Rossouw, W., Seedat, S., & Stein, D. (2007). Risk indicators and psychopathology in traumatized children and adolescents with a history of child sexual abuse. *European Child and Adolescent Psychiatry*, *17*(2), 93-98. doi:10.1007/s00787-007-0641-0
- Crawford, T. A. & Lipsedge, M. (2004). Seeking help for psychological distress: The interface of Zulu traditional healing and Western biomedicine. *Mental Health, Religion & Culture*, *7*(2): 131-148. doi:10.1080/13674670310001602463
- Dunkle, K. L., Jewkes, R. K., Brown, H. C., Yoshihama, M., Gray, G. E., McIntyre, J. A., & Harlow, S. D. (2004). Prevalence and patterns of gender-based violence and revictimization among women attending antenatal clinics in Soweto, South Africa. *American Journal of Epidemiology*, *160*(3), 230-239. doi:10.1093/aje/kwh194
- Fang, X., Brown, D. S., Florence, C. S., & Mercy, J. A. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child abuse & neglect*, *36*(2), 156-165. doi:10.1016/j.chiabu.2011.10.006
- Fincham, D., Altes, L., Stein, D., & Seedat, S. (2009). Posttraumatic stress disorder symptoms in adolescents: Risk factors versus resilience moderation. *Comprehensive Psychiatry*, *50*(3), 193-199. doi:10.1016/j.comppsy.2008.09.001
- Freyd, J. J., Putnam, F. W., Lyon, T. D., Becker-Blease, K. A., Cheit, R. E., Siegel, N. B., & Pezdek, K. (2005). The science of child sexual abuse. *Science*, *308*(5721), 501-501.
- Garwood, S. K., Gerassi, L., Jonson-Reid, M., Plax, K., & Drake, B. (2015). More than poverty: the effect of child abuse and neglect on teen pregnancy risk. *Journal of Adolescent Health*, *57*(2), 164-168. doi:10.1016/j.jadohealth.2015.05.004
- Gillies, D., Taylor, F., Gray, C., O'Brien, L., & D'Abrew, N. (2013). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents (Review). *Evidence-Based Child Health: A Cochrane Review Journal*, *8*(3), 1004-1116. doi:10.1002/14651858.CD006726.pub2.

- Jewkes, R. (2006). Beyond stigma: Social responses to HIV in South Africa. *Lancet*, **368**, 430–431. [http://dx.doi.org/10.1016/S0140-6736\(06\)69130-7](http://dx.doi.org/10.1016/S0140-6736(06)69130-7)
- Jewkes, R., Dunkle, K., Koss, M. P., Levin, J. B., Nduna, M., Jama, N., & Sikweyiya, Y. (2006). Rape perpetration by young, rural South African men: prevalence, patterns and risk factors. *Social Science & Medicine*, **63**(11), 2949–2961. doi:10.1016/j.socscimed.2006.07.027
- Jewkes, R., Dunkle, K., Nduna, M., Jama, P., & Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect*, **34**(11), 833–841. doi:10.1016/j.chiabu.2010.05.002
- Jordans, M. J., Tol, W. A., Susanty, D., Ntamatumba, P., Luitel, N. P., Komproe, I. H., & de Jong, J. T. (2013). Implementation of a mental health care package for children in areas of armed conflict: a case study from Burundi, Indonesia, Nepal, Sri Lanka, and Sudan. *PLoS Med*, **10**(1), e1001371.
- Kalichman, S. C., Simbayi, L. C., Jooste, S., Toefy, Y., Cain, D. & Cherry C. (2005). Development of a brief scale to measure AIDS-related stigma in South Africa. *AIDS and Behavior*, **9**, 135–143. <http://dx.doi.org/10.1007/s10461-005-3895-x>, PMID:15933833
- Kaminer, D., & Eagle, G. (2010). *Traumatic stress in South Africa*. Johannesburg, South Africa: Wits University.
- Knipscheer, J.W. & Kleber, R.J. (2005). Help seeking behaviour regarding mental health problems of Mediterranean migrants in The Netherlands: Familiarity with care, consultation attitude and utilization of services. *The International Journal of Social Psychiatry*, **51**(4), 376 - 386. doi:10.1177/0020764005060853
- Koocher, G. P., & Keith-Spiegel, P. (2008). *Ethics in psychology and the mental health professions: Standards and cases*. Oxford University Press.
- Madu, S. (2003). The relationships between parental physical availability and child sexual, physical and emotional abuse: A study among a sample of university students in South Africa. *Scandinavian Journal of Psychology*, **44**(4), 311-318. doi:10.1111/1467-9450.00350
- Madu, S., & Peltzer, K. (2000). Risk factors and child sexual abuse among secondary school students in the Northern Province (South Africa). *Child Abuse & Neglect*, **24**(2), 259-268. doi:10.1016/s0145-2134(99)00128-3
- Marmot, M. (2004). *Status syndrome*. London: England: Bloomsbury.
- Mathews, B., & Collin-Vézina, D. (2016). Child sexual abuse: Raising awareness and empathy is essential to promote new public health responses. *Journal of public health policy*, **37**(3), 304-314. doi:10.1057/jphp.2016.21
- Meissner, O. (2004). The traditional healer as part of the primary health care team? *South African Medical Journal*, **94**, 901–902.
- Miller, K. E., Omidian, P., Rasmussen, A., Yaqubi, A., & Daudzai, H. (2008). Daily stressors, war experiences, and mental health in Afghanistan. *Transcultural Psychiatry*, **45**(4), 611-638. doi:10.1177/1363461508100785
- Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: bridging the divide between trauma-focused and psychosocial frameworks. *Social science & medicine*, **70**(1), 7-16. doi:10.1016/j.socscimed.2009.09.029

- Nickerson, A., Bryant, R. A., Silove, D., & Steel, Z. (2011). A critical review of psychological treatments of posttraumatic stress disorder in refugees. *Clinical psychology review*, *31*(3), 399-417. doi:10.1016/j.cpr.2010.10.004
- Rasmussen, A., Nguyen, L., Wilkinson, J., Vundla, S., Raghavan, S., Miller, K. E., & Keller, A. S. (2010). Rates and impact of trauma and current stressors among Darfuri refugees in Eastern Chad. *American Journal of Orthopsychiatry*, *80*(2), 227-236. doi:10.1111/j.1939-0025.2010.01026.x
- Reading, R., Bissell, S., Goldhagen, J., Harwin, J., Masson, J., Moynihan, S., ... Webb, E. (2009). Promotion of children's rights and prevention of child maltreatment. *The Lancet*, *373*(9660), 332-343.
- Saraceno, B., van Ommeren, M., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., ... Underhill, C. (2007). Barriers to improvement of mental health services in low income and middle-income countries. *The Lancet*, *370*(9593), 1164-1174. doi:10.1016/s0140-6736(07)61263-x
- Seedat, M., van Niekerk, A., Jewkes, R., Suffla, R., & Ratele, K. (2009). Violence and injuries in South Africa: prioritising an agenda for prevention. *The Lancet*, *374*, 1011-1022. doi:10.1016/s0140-6736(09)60948-x
- Seedat, S., Williams, D. R., Herman, A. A., Moomal, H., Williams, S. L., Jackson, P. B., ... Stein, D. J. (2009a). Mental health service use among South Africans for mood, anxiety and substance use disorders. *South African Medical Journal*, *99*(5), 346-352.
- Sorsdahl, K., Stein, D. J., Grimsrud, A., Seedat, S., Flisher, A.J., Williams, D., & Myer, L. (2009). Traditional healers in the treatment of common mental disorders in South Africa. *The Journal of Nervous and Mental Disease*, *197*(6), 434-441. doi:10.1097/nmd.0b013e3181a61dbc
- Suliman, S., Mkabile, S. G., Fincham, D. S., Ahmed, R., Stein, D. J., & Seedat, S. (2009) Cumulative effect of multiple traumas on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry*, *50*(2), 121-127. doi:10.1016/j.comppsy.2008.06.006
- Tol, W. A., Barbui, C., Bisson, J., Cohen, J., Hijazi, Z., Jones, L., ... van Ommeren, M. (2014). World Health Organization guidelines for management of acute stress, PTSD, and bereavement: Key challenges on the road ahead. *PLoS Medicine*, *11*(12), e1001769.
- Tol, W. A., Barbui, C., Galappatti, A., Silove, D., Betancourt, T. S., Souza, R., ... van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: linking practice and research. *Lancet*, *378*(9802), 1581-1591. doi:10.1016/s0140-6736(11)61094-5
- Tol, W. A., Komproe, I. H., Jordans, M. J. D., Ndayisaba, A., Ntamutumba, P., Sipsma, H., ... de Jong, J. T. V. M. (2014a). School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. *BMC Medicine*, *12*(1), 56. doi:10.1186/1741-7015-12-56
- Van Westrhenen, N., Fritz, E., Oosthuizen, H., Lemont, S., Vermeer, A., & Kleber, R. J. (2017). Creative Arts in Psychotherapy Intervention for Children after Trauma. *The Arts in Psychotherapy*. In press.
- Van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Newbury Park, CA: Sage.

World Health Organization (2015). Child maltreatment. Retrieved from: http://www.who.int/topics/child_abuse/en/



8

Creative arts therapy for traumatized children in South Africa: An evaluation study

Nadine van Westrhenen
Elzette Fritz
Adri Vermeer
Paul Boelen
Rolf J. Kleber

Submitted

Acknowledgment of author contributions:
Research design: N van Westrhenen, E Fritz & R Kleber,
Data collection: N van Westrhenen,
Data analysis: N van Westrhenen,
Paper writing: N van Westrhenen, E Fritz, A Vermeer, P Boelen & R Kleber

Abstract

Aim: To evaluate the effect of a 10-session creative arts group therapy programme on posttraumatic stress symptoms, behavioural problems, and posttraumatic growth, in children who experienced a traumatic event.

Design: A multicentre non-randomized controlled trial with a treatment and control condition conducted in South Africa (4 sites).

Methods: 125 children aged 7 to 13 years were assigned either to the treatment condition receiving creative arts therapy or a control condition with a low-level supportive programme without treatment. In total 47 children completed the programme and questionnaires assessing posttraumatic stress, posttraumatic growth and behaviour problems both at baseline and follow-up; 23 in the treatment group and 24 in the control group. Adjusted mean differences were analysed using ANCOVA with bootstrapping.

Results: Results showed that both hyperarousal symptoms ($d=0.61$) and avoidance symptoms ($d=0.41$) decreased more in the treatment group compared to the control group. Behavioural problems also reduced ($d=0.40$) and posttraumatic growth slightly increased ($d=0.34$) in the treatment group, but there was no significant difference compared to the control condition.

Conclusion: In spite of severe challenges implementing and executing this pioneering study in underprivileged areas of South Africa, support was found for creative arts therapy reducing hyperarousal and avoidance symptoms, but not for other symptoms. Data showed a positive trend of creative arts therapy decreasing negative psychological symptoms, which could be further explored in future studies.

Keywords: Creative arts therapy, child trauma, intervention, group therapy, South Africa

Introduction

Trauma exposure

For a country not at war, South Africa is a place with extreme high rates of traumatic exposure, with one of the highest rates of interpersonal violence and domestic abuse in the world (Seedat, van Niekerk, Jewkes, Suffla, & Ratele, 2009). Especially violence against children is omnipresent, from severe beatings to sexual violence and rape. Exposure has been reported as high as 98.9% for community violence (Kaminer, du Plessis, Hardy, & Benjamin, 2013) and 54.2% for sexual abuse (Madu & Peltzer, 2001).

The high exposure to interpersonal violence increases vulnerability to mental disorders such as posttraumatic stress disorder (PTSD) (Fincham, Altes, Stein, & Seedat, 2009; Suliman et al., 2009). High levels of PTSD have been reported amongst poor urban children in South Africa and estimations have been published of 22.2% and 23.6% (Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004; Suliman et al., 2009). Apart from PTSD, children exposed to interpersonal violence are more likely to experience a wide range of adverse psychological problems, such as depression, suicidality, and substance abuse (Jewkes, Dunkle, Nduna, Jama, & Puren, 2010; Suliman et al., 2009) and externalizing behaviour problems such as violent and anti-social behaviour (King et al., 2004).

Apart from negative psychological consequences of abuse and neglect, positive change may also result from traumatic exposure, called posttraumatic growth (PTG) (Calhoun & Tedeschi, 2006). PTG generally includes five domains; relating to others, personal strength, appreciation of life, spiritual change, and new possibilities (Kilmer et al., 2009). PTG has mostly been studied in adults and there is a growing body of literature describing the phenomenon of PTG in children and adolescents (Alisic, van der Schoot, Van Ginkel, & Kleber, 2008; Clay, Knibbs, & Joseph, 2009).

Child trauma treatment

Different types of interventions have been proven to be effective for improving mental health in traumatized children. Particularly cognitive behaviour therapy (CBT) has emerged as one of the most effective and widely used treatments (Gillies, Taylor, Gray, O'Brien, & D'Abrew, 2013; Silverman et al., 2008). More evidence, however, is required in order to establish the effectiveness of different therapies in the longer term, and for comparability of different types of therapy, such as CBT, play therapy, eye movement desensitization and reprocessing (EMDR), art therapy, and psychodynamic therapy (Gillies et al., 2013). Moreover, since most studies have been conducted in high-income

countries, evidence is required for the applicability of trauma interventions in a low- and middle-income context (Tol et al., 2011).

Creative arts therapy is a widespread approach in the treatment of child post trauma disorders. It includes different modalities of art, music, dance and drama in combination with principles of psychotherapy and counselling (Malchiodi, 2015). Research with children found that the use of art can facilitate exposure to traumatic cues in a non-threatening manner, allowing for desensitization of anxiety, articulation of affective states (Kozłowska & Hanney, 2001), and more detailed and emotional narratives (Lev-Wiesel & Liraz, 2007). Also, arts-based methods can assist children in developing coping skills, self-awareness, and aspects of self-esteem (Coholic, Loughheed, & Cadell, 2009). Facilitating (creative) therapies for traumatized children in a group setting can have additional benefits, because group members can facilitate trust and disclosure, providing an opportunity for children to realize they are not alone in their problems, and finding peer-support (Killian & Brakarsh, 2004; Yalom & Leszcz, 2008).

Although the possibilities of creative arts therapy appear promising, there is very little research available on the efficacy of such therapies for traumatized children (Eaton, Doherty, & Widrick, 2007; Van Westrhenen & Fritz, 2014). Only a few studies have explored the effects of creative therapy for children on reducing posttraumatic stress symptoms (i.e. Lyshak-Stelzer, Singer, Patricia, & Chemtob, 2007; Ugurlu, Akca, & Acarturk, 2016) and behavioural difficulties (Quinlan, Schweitzer, Khawaja, & Griffin, 2016). In the South African context, to our knowledge, only one group art therapy intervention for sexually abused girls from 8 to 11 years old has been evaluated (Pretorius & Pfeifer, 2010). This study showed positive results regarding anxiety and depression. Apart from this study, methodologically sound studies focusing on the effects of creative arts therapy on specific outcome measures are scarce.

Study purpose

Considering the lack of evidence for the effect of creative arts therapy interventions for traumatized children, and the absence of evidence on trauma interventions for children in low- and middle-income countries, the present study aims to assess the possible influence of a creative arts group therapy programme for traumatized children in South Africa, on posttraumatic stress symptoms, behaviour problems and posttraumatic growth. We performed a non-randomized controlled trial comparing creative arts therapy with a low-level supportive programme without treatment and hypothesized that a creative arts therapy programme is more efficacious compared to the control condition in 1) reducing posttraumatic stress symptoms, 2) reducing

behavioural problems, and 3) increasing posttraumatic growth, in children who experienced one or more traumatic events.

Methods

Design

This was a multicentre non-randomized controlled trial conducted in South Africa (4 sites) with two conditions, and including 3 measurements at baseline and follow-up.

Sampling

The study took place at four branches of a child abuse clinic in Johannesburg, South Africa, from January 2014 to June 2016. Participants were selected for this study from all children that came for intake at the trauma clinic, based on the following inclusion criteria: (1) experienced one or multiple events of trauma or abuse between three months and twelve months ago; (2) developmental age between 7 and 13 years at the time of enrolment; (3) can speak English. Exclusion criteria were (1) mental retardation, autistic disorder, and blindness, (2) already had any form of previous trauma treatment. Social workers conducting intakes selected and assigned the children to the therapy and the control condition. This was done non-random based on practical considerations of the difficulty in obtaining participants for the study, and the availability and willingness of the participants.

Outcome measures

Posttraumatic stress symptoms. Posttraumatic stress symptoms were measured by the Child PTSD Checklist (C-PTSD-C) (Amaya-Jackson, McCarthy, Chemey, & Newman, 1995). This self-report measure is a 28-item checklist that rates DSM-IV-TR characterized PTSD symptoms in the past month. The scale uses a 4-point Likert scale, ranging from 'not at all' (scored 0) to 'all the time' (scored 3), with higher scores indicating more severe PTSD symptoms. The C-PTSD-C has three subscales: Hyperarousal, avoidance, and reexperiencing. Psychometric properties have been published in the South African context by Boyes, Cluver, and Gardner (2012), and the instrument was found to be a reliable and valid measure of PTSD symptoms. Internal consistency for the scale in the current sample was good between $\alpha=.78$ (baseline) and $\alpha=.90$ (follow-up).

Behaviour problems. Behaviour problems were reported by the parents or a close relative on the Child Behaviour Checklist (CBCL) (Achenbach, 1991). This checklist consists of 120 items, assessing emotional and behavioural problems, rated on a 3-point scale ranging from 'not true' (scored 0) to 'very true or often true' (scored 2). The CBCL has

three main scales, internalizing, externalizing and total problems, as well as eight sub-scales comprising specific behaviour domains. Research using the CBCL has demonstrated its sound reliability and validity (Achenbach, 1991). Internal consistency in the current sample was excellent (baseline $\alpha=.96$, follow-up $\alpha=.96$).

Posttraumatic growth. Posttraumatic growth was measured with the self-report Posttraumatic Growth Inventory for Children- Revised (PTGI-C-R) (Kilmer et al., 2009). The instrument has 10 items using a four-point Likert scale ranging from no change (scored 0) to a lot (scored 3). Research findings demonstrate validity and reliability of the revised scale (Kilmer et al., 2009). Internal consistency for the full scale in the current sample was found between $\alpha=.70$ (baseline) and $\alpha=.76$ (follow-up).

Conditions

Treatment condition. Children in the treatment condition attended the Creative Arts in Psychotherapy (CAP) intervention (Van Westrhenen et al., 2017). CAP is a structured programme of ten 90-minute sessions, specifically developed for traumatized children in the age between 8 and 12 years. The sessions are facilitated in groups of six to eight participants by trained local social workers, and different activities incorporating a range of creative arts tools are used to work towards specific session goals. Overall, the intervention aims to improve identification and communication of emotions, inter- and intrapersonal skills and resilience to cope with future crisis, increase post-traumatic growth, and reduce posttraumatic stress symptoms.

Control condition. The control group did not attend any therapy, but a so called ‘court preparation and support programme’. This non-therapeutic programme focuses on providing children and parents skills, emotional support and legal knowledge in preparation for their appearance in court, during three-hour monthly group sessions. The children in this control condition attended about 3 sessions (over a 2-month period) during the time this study took place. The sessions were solely focused on the court process, and not on any psychosocial impact of the trauma on the client’s personal life.

Procedure

To detect a change in the dependent variables between the two conditions, with a two-sided 5% significance level, medium effect size and a power of 80%, a sample size of 64 per group was necessary (Faul, Erdfelder, Lang, & Buchner, 2007). Baseline questionnaires were administered during the introduction session of the creative therapy programme (treatment condition) and during the monthly court preparation sessions (control condition). Follow-up questionnaires were subsequently administered after the final session of the creative therapy programme, and during another court prepa-

ration session on average two months after baseline measurements. In a number of instances individual appointments were arranged to administer questionnaires if the parents and children were not available for group sessions.

Ethical approval

Permission for this study was obtained from the Faculty of Humanities Academic Ethics Committee of the University of Johannesburg. Informed consent and informed assent was obtained from the children and their parents or primary caregiver prior to participation in this study. Participation was volunteer and confidential. Children in the control group were offered the option to attend therapy at the clinic after participating in the court preparation and support programme.

Data analysis

Analyses were conducted using IBM SPSS statistics 22. Missing data on item level were replaced using multiple imputation. The multiple imputations appeared similar and comparable, and therefore one imputation was selected to allow for subsequent analysis including bootstrapping. Baseline analyses were performed using bivariate analysis, exploring differences on treatment condition, gender, race, type of trauma and baseline measures of PTSD, PTG and behavioural problems. To explore the treatment effect, the mean difference score between baseline and follow-up measurements was compared between the different test conditions (treatment vs control) using ANCOVA with ethnicity and type of abuse as covariates. Considering the small sample and non-normal distribution of data, bootstrapping techniques were applied.

Results

Participants flow

In total 125 children participated with baseline measurements in the study. Subsequently, social workers referred 74 participants to the treatment condition, and 51 participants to the control condition. For the treatment condition, after participant dropout and exclusion of incomplete cases, a total of 23 participants were included for the analysis of the C-PTSD-C and the PTGI-C-R and a total of 18 participants were included for the analysis of the CBCL. Reasons for drop out were mostly related to practical challenges such as transport from and to the clinic. For the control condition, after dropout and exclusion of incomplete cases, analysis were conducted with a sample of 24 participants for the C-PTSD-C and the PTGI-C-R, and 19 participants for the CBCL. A summary of the participants' flow through the different project stages is provided (Figure 1).

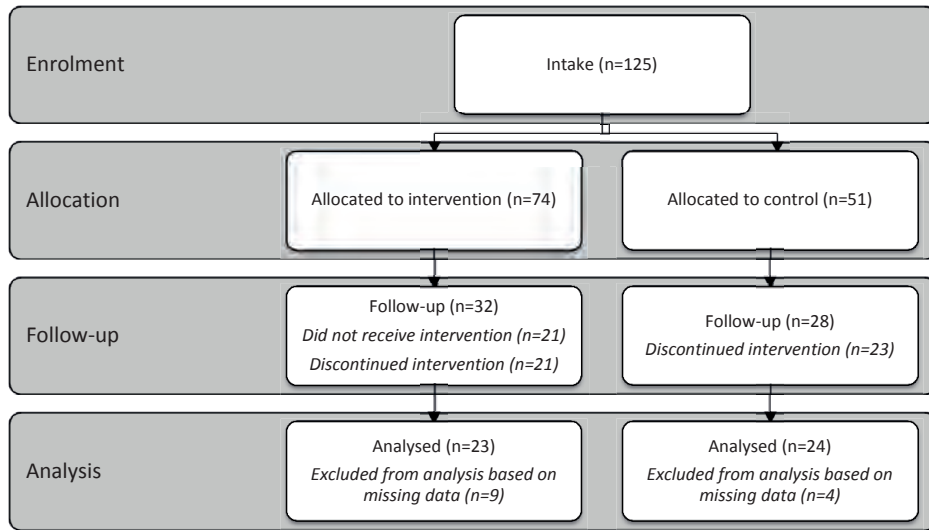


Figure 1: Flow diagram of progress through the phases of the experimental trial of two groups.

The final sample of 47 participants for analysis of the C-PTSD-C and the PTGI-C-R consisted of 23 children in the treatment group, 3 boys and 20 girls, aged between 7 and 13 ($M=10.14$, $SD=1.92$). The control group consisted of 24 children, 8 boys and 16 girls, aged between 8 and 13 ($M=10.50$, $SD=1.32$). The final sample of 37 participants for analysis of the CBCL consisted of 18 children in the treatment group, 2 boys and 16 girls, aged between 7 and 13 ($M=9.93$, $SD=1.94$). The control group consisted of 19 children, 6 boys and 13 girls, aged between 8 and 13 ($M=10.30$, $SD=1.38$). The majority of children in the study had experienced sexual abuse, five children experienced physical abuse (Table 1).

Table 1 Baseline demographic characteristics in means (SD) or numbers (%)

	Sample for PTSD & PTG		Sample for CBCL	
	Treatment (n=23)	Control (n=24)	Treatment (n=18)	Control (n=19)
Age (years)	10.14 (1.92)	10.50 (1.32)	9.93 (1.94)	10.30 (1.38)
Gender (female)	20 (87.0%)	16 (66.7%)	16 (88.9%)	13 (68.4%)
Ethnicity:				
African	22 (95.7%)	16 (66.7%)	18 (100%)	12 (63.2%)
Asian	-	2 (8.3%)	-	2 (10.5%)
Coloured	1 (4.3%)	2 (8.3%)	-	1 (5.3%)
White	-	4 (16.7%)	-	4 (21.1%)
Type of trauma:				
Sexual abuse	23 (100%)	17 (70.8%)	18 (100%)	14 (73.7%)
Physical abuse	-	5 (20.8%)	-	3 (15.8%)
Other	-	2 (8.3%)	-	2 (10.5%)

Baseline data

The treatment group ($M=26.78$, $SD=11.48$) and control group ($M=33.99$, $SD=11.57$) differed significantly on PTSD symptoms at baseline ($t(45)=-2.143$, $p<.05$). Fisher's exact test for the sample of 47 participants did show that there were significantly more black children in the treatment group (95.7%) compared to the control group (66.7%; $p<.05$), and there were also more children that were sexually abused in the treatment group (100%) compared to the control group (70.8%; $p<.01$). Also for the sample of 37 participants, there were more black children in the treatment group (100%) compared to the control group (63.2%; $p<.01$), and more children had been sexually abused in the treatment group (100%) compared to the control group (73.7%, $p<.05$). Other variables tested did not differ significantly across conditions.

Evaluation of outcomes

Controlling for the effect of ethnicity and type of abuse in an ANCOVA, bootstrapped adjusted mean differences showed that hyperarousal symptoms significantly decreased in the treatment condition between baseline and follow-up (from $M=10.39$ to $M=6.77$, $d=0.61$), where it slightly increased for the control group (from $M=6.73$ to $M=7.46$, $d=-0.15$; adjusted mean difference=4.36, 95% CI 0.36, 8.69). Moreover, avoidance symptoms decreased significantly more for the treatment condition (from $M=13.48$ to $M=11.13$, $d=0.41$) compared to the control condition (from $M=11.05$ to $M=10.99$, $d=0.01$; adjusted mean difference=4.11, 95% CI -0.03, 8.42), yet the effect size was small. Overall PTSD symptoms, as well as reexperiencing symptoms also decreased, but not significantly more than in the control condition, see Table 2.

Table 2 Summary results treatment and control group

Scale (range)	Treatment		Control		Adjusted mean difference* (95% CI)
	Baseline (mean (SD))	Follow-up (mean (SD))	Baseline (mean (SD))	Follow-up (mean (SD))	
PTSD symptoms	n=23		n=24		
Total (0-84)	33.99 (11.57)	27.06 (18.18)	26.78 (11.48)	26.84 (12.68)	9.40 (-0.18, 20.01)
Avoidance (0-30)	13.48 (4.78)	11.13 (6.63)	11.05 (5.15)	10.99 (4.54)	4.11 (0.03, 8.42)
Reexperiencing (0-27)	9.43 (5.25)	8.64 (6.42)	8.75 (3.96)	7.83 (4.59)	0.33 (-3.03, 3.60)
Hyperarousal (0-24)	10.39 (4.96)	6.77 (6.72)	6.73 (4.20)	7.46 (5.26)	4.36 (0.36, 8.69)
Behaviour problems	n=18		n=19		
Total (0-240)	62.91 (35.97)	48.98 (33.66)	71.35 (37.01)	51.46 (28.12)	-13.90 (-53.28, 20.88)
Internalizing (0-78)	18.81 (11.76)	14.59 (11.14)	21.08 (10.45)	14.19 (7.60)	-5.80 (-16.65, 3.91)
Externalizing (0-70)	16.68 (10.09)	14.05 (9.75)	20.22 (13.45)	16.15 (11.62)	-2.12 (-14.23, 8.20)
Posttraumatic growth	n=23		n=24		
Total (0-30)	22.34 (5.29)	23.99 (4.42)	19.75 (5.25)	23.44 (5.01)	1.63 (-2.70, 6.08)

*Mean difference score adjusted for ethnicity and type of abuse based on 1000 bootstrap samples

Behaviour problems also showed a decrease over time in both the treatment condition (from $M=62.91$ to $M=48.98$, $d=0.40$) and the control condition (from $M=71.35$ to $M=51.46$, $d=0.61$), and internalizing behaviour decreased more than externalising behaviour, but these changes were not statistically significant. Lastly, posttraumatic growth increased in both the treatment condition (from $M=22.34$ to $M=23.99$, $d=0.34$) and the control condition (from $M=19.75$ to $M=23.44$, $d=0.72$), but there was no significant difference in this increase between conditions (Table 2 and Figure 2).

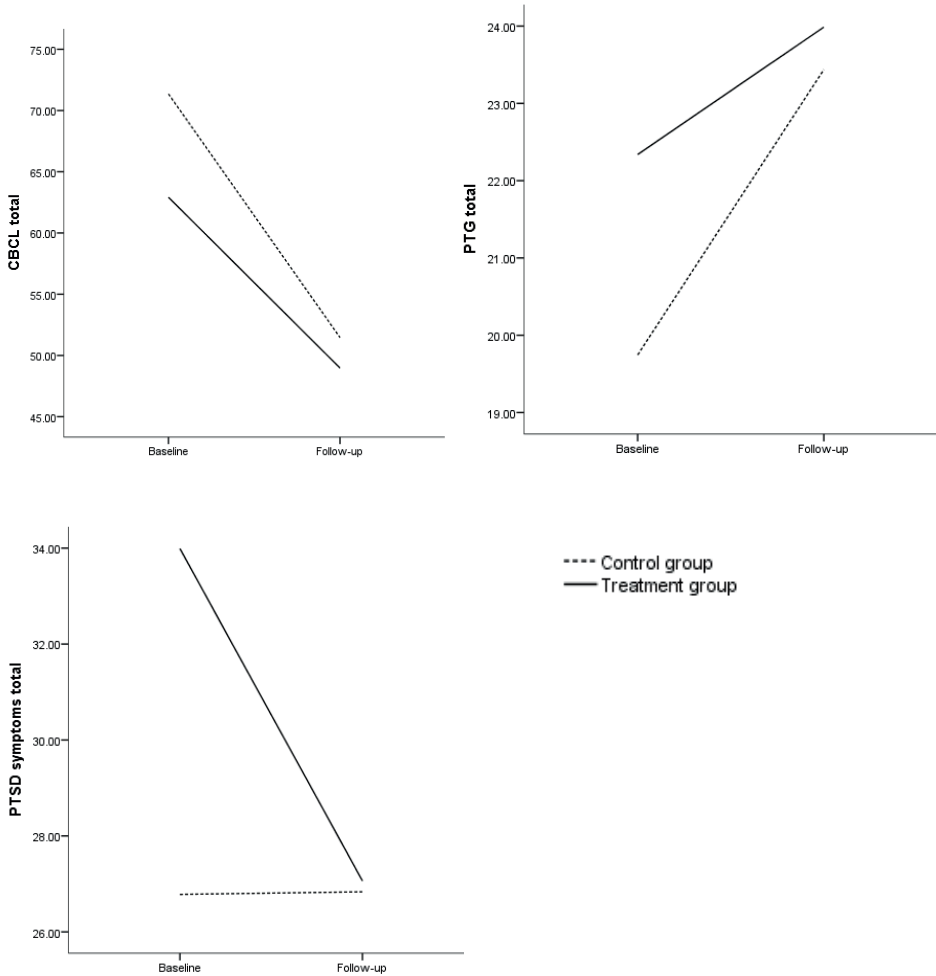


Figure 2: Posttraumatic stress symptoms, behaviour problems and posttraumatic growth scores of the treatment and control groups at baseline and follow-up. The scores are mean total scores.

Discussion

Evaluation of the creative arts therapy programme showed that compared to the control condition, hyperarousal symptoms significantly decreased after therapy with a medium effect size. Avoidance symptoms also decreased after therapy, but the effect size was small. No support was found for our hypothesis that the creative arts therapy programme is more efficacious than a low-level supportive programme in reducing reexperiencing symptoms, behaviour problems and increasing posttraumatic growth. Below we will discuss the outcomes of the intervention, reflect on barriers in recruitment and retention and discuss methodological limitations.

Therapeutic outcomes

Previous studies highlighted the positive effects of creative arts therapy specifically on reducing psychological stress (Stuckey & Nobel, 2010), having a soothing capacity (Jiang, Rickson, & Jiang, 2016; Malchiodi, 2015) and establishing safety (Cassidy, Turnbull, & Gumley, 2014), which may in turn have facilitated decreased hyperarousal and regain or develop healthy emotion regulation after experiencing severe stress. The positive effect of group therapy and activities facilitating emotional expression and working through the traumatic experience may have contributed to reduced avoidance symptoms.

The creative arts therapy programme (CAP) did not diminish reexperiencing PTSD symptoms, behaviour problems and posttraumatic growth as successfully. It could be that the therapeutic activities in the treatment protocol did not address all these different outcome measures as purposefully as intended, or that the lack of a direct trauma-exposure component in the treatment effected the outcomes. Currently, there is a debate whether directly facilitating re-exposure in therapy would be more beneficial (Ter Heide, Mooren, & Kleber, 2016). On the one hand, it has been found that trauma-focused treatments show higher effect sizes compared to non-trauma-focused treatments (Ehring et al., 2014), yet a recent meta-analysis showed this difference is rather small and not clinically meaningful (Tran & Gregor, 2016). Moreover, exposure therapies are also associated with an early and high dropout and patients having remaining symptoms (Kehle-Forbes et al., 2013; Schnurr et al., 2007).

Moreover, not all these interventions have been shown to be effective in a context of ongoing adversity such as chronic poverty, community violence and war (Nickerson, Bryant, Silove, & Steel, 2011; Tol et al., 2011, 2014). Therefore, another explanation for the CAP programme evaluation results may be that the circumstances of ongoing adversity are impeding the potential therapeutic benefits of the intervention. Lastly, most trauma treatment studies in a developing context have focused solely on PTSD

and internalizing symptoms as outcome measures (Tol et al., 2011), and perhaps other outcomes such as resilience, self-confidence, and social support could be more relevant in a setting of poverty, hardships and crime and should be an essential focus in future studies.

Recruitment and retention

Despite the very high rates of abuse and trauma exposure in South Africa and their negative psychological consequences (Seedat et al., 2009), few children enrolled and completed the free creative therapy programme. From the 125 children initially referred to the programme, 62.4% dropped out in both the treatment and control condition. Unfortunately, these difficulties in reaching patients and high dropout rates of mental health treatment are well-known issues in developing countries (Bruwer et al., 2011; Seedat et al., 2009a).

The implemented creative therapy intervention aimed to explicitly address previously reported structural barriers (e.g., problems with availability and accessibility of services) by working from a decentralized location, building capacity of skilled health care workers through training, and incorporating a culturally congruent and low-cost approach (Saraceno et al., 2007; Tol et al., 2011). Nevertheless, attitudinal barriers (e.g., low perceived need for treatment, low mental health literacy, stigma) appeared to be more substantial in this context (Bruwer et al., 2011; Sareen et al., 2007) and harder to address. Therefore, this problem of recruitment and retention in crime-stricken and underprivileged settings such as in South African townships deserves even more serious consideration than presumed. It would be more effective in these problematic socio-economic circumstances to combine therapy interventions with programmes explicitly focusing on mental health education providing an intrinsic motivation for therapy attendance (Bruwer et al., 2011). Such an approach would also fit into the emphasis on social rehabilitation in trauma care as suggested by several authors on global health (Bracken et al., 2012).

Methodological limitations

Due to several practical challenges in the research project, the study had to be implemented with more flexibility and therefore less rigor than initially intended. This resulted in several inconsistencies in data collection, decreasing the value of evidence of this study. Clearly, the small sample size and insufficient possibilities for randomization were a substantial limitation in this study. Furthermore, 45.3% of the children in the treatment group who received creative arts therapy only attended one or two sessions out of the prescribed ten. The current results do not accurately reflect the possible full potential of the creative therapy programme as mentioned above.

In view of the complexity of the South African setting in which this study was conducted, we considered the randomized controlled trial (RCT) approach inappropriate. The RCT design focuses on quantitative outcomes based on prior set objectives and therefore ignores important contextual factors that influence programme efficiency and effectiveness, such as cultural norms and values and organizational environment and philosophies (Seligman, 1995). It was also difficult to respond to the different practical and logistical challenges highlighted above, which in the context of low income countries can be considered inevitable. We therefore recommend the use of mixed methods for future studies in a similar context, incorporating for instance interviews, focus-groups and observational data to add to questionnaires (Boeije, Slagt, & van Wesel, 2013). In this way, we can enrich the knowledge on how to implement evidence-based treatment for traumatized and abuse children in developing countries more effectively.

Conclusion

This pioneering study conducted in South Africa investigated the potential effects of a creative arts therapy intervention programme for traumatized children. Although severe challenges implementing and executing the study limited the power of this evaluation study, results show positive patterns going into the right direction. We hope our insights will inspire more work in this area. Considering the high need for evidence-based trauma care for children in low income countries, we recommend more studies to be conducted on the efficacy of creative arts therapy and the effects of trauma-intervention studies.

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*. Burlington, VT: Department of Psychiatry, University of Vermont.
- Alisic, E., van der Schoot, T. A. W., van Ginkle, J. R., & Kleber, R. J. (2008). Looking Beyond Post-traumatic Stress Disorder in Children. *Journal of Clinical Psychiatry, 69*(9), 1455–1461. doi:10.4088/jcp.v69n0913
- Amaya-Jackson, L., McCarthy, G., Newman, E., & Chemey, M. (1995). Child PTSD Checklist. Unpublished instrument.
- Boeije, H., Slagt, M., & van Wesel, F. (2013). The contribution of mixed methods research to the field of childhood trauma: A narrative review focused on data integration. *Journal of Mixed Methods Research, 7*(4), 347-369. doi:10.1177/1558689813482756
- Boyes, M. E., Cluver, L. D., & Gardner, F. (2012). Psychometric properties of the child PTSD checklist in a community sample of South African children and adolescents. *PLoS one, 7*(10), e46905. doi:10.1371/journal.pone.0046905
- Bracken, P., Thomas, P., Timimi, S., Asen, E., Behr, G., Beuster, C., ... Downer, S. (2012). Psychiatry beyond the current paradigm. *British Journal of Psychiatry, 201*(6), 430-434. doi:10.1192/bjp.bp.112.109447
- Bruwer, B., Sorsdahl, K., Harrison, J., Stein, D.J., Williams, D., & Seedat, S. (2011). Barriers to mental health care and predictors of treatment dropout in the South African Stress and Health Study. *Psychiatric Services, 62*(7), 774-781. doi:10.1176/ps.62.7.pss6207_0774
- Calhoun, L. G., & Tedeschi, R. G. (2006). *Handbook of posttraumatic growth: Research and practice*. Mahwah, NJ: Erlbaum.
- Cassidy, S., Turnbull, S., & Gumley, A. (2014). Exploring core processes facilitating therapeutic change in Dramatherapy: A grounded theory analysis of published case studies. *The Arts in Psychotherapy, 41*(4), 353–365. doi:10.1016/j.aip.2014.07.003
- Clay, R., Knibbs, J., & Joseph, S. (2009). Measurement of posttraumatic growth in young people: A review. *Clinical Child Psychology and Psychiatry, 14*(3), 411-422. doi:10.1177/1359104509104049
- Coholic, D., Loughheed, S., & Cadell, S. (2009). Exploring the helpfulness of arts-based methods with children living in foster care. *Traumatology, 15*(3), 64–71. doi:10.1177/1534765609341590
- Eaton, L. G., Doherty, K. L., & Widrick, R. M. (2007). A review of research and methods used to establish art therapy as an effective treatment method for traumatized children. *The Arts in Psychotherapy 34*(3), 256– 262. doi:10.1016/j.aip.2007.03.001
- Ehring, T., Welboren, R., Morina, N., Wicherts, J. M., Freitag, J., & Emmelkamp, P. M. (2014). Meta-analysis of psychological treatments for posttraumatic stress disorder in adult survivors of childhood abuse. *Clinical Psychology Review, 34*(8), 645-657. doi:10.1016/j.cpr.2014.10.004
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175-191. doi:10.3758/bf03193146

- Fincham, D. S., Altes, L. K., Stein, D. J., & Seedat, S. (2009). Posttraumatic stress disorder symptoms in adolescents: Risk factors versus resilience moderation. *Comprehensive Psychiatry*, *50*(3), 193-199. doi:10.1016/j.comppsy.2008.09.001
- Gillies, D., Taylor, F., Gray, C., O'Brien, L., & D'Abrew, N. (2013). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents (Review). *Evidence-Based Child Health: A Cochrane Review Journal*, *8*(3), 1004-1116. doi:10.1002/14651858.cd006726.pub2
- Jewkes, R., Dunkle, K., Nduna, M., Jama, P., & Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect*, *34*(11), 833-841. doi:10.1016/j.chiabu.2010.05.002
- Jiang, J., Rickson, D., & Jiang, C. (2016). The mechanism of music for reducing psychological stress: Music preference as a mediator. *The Arts in Psychotherapy*, *48*, 62-68. doi:10.1016/j.aip.2016.02.002
- Kaminer, D. du Plessis, B., Hardy, A., & Benjamin, A. (2013). Exposure to violence across multiple sites among young South African adolescents. *Peace and Conflict: Journal of Peace Psychology*, *19*(2), 112-114. doi:10.1037/a0032487
- Kehle-Forbes, S. M., Polusny, M. A., MacDonald, R., Murdoch, M., Meis, L. A., & Wilt, T. J. (2013). A systematic review of the efficacy of adding nonexposure components to exposure therapy for posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy*, *5*(4), 317-322. doi:10.1037/a0030040
- Killian, B., & Brakarsh, J. (2004). Therapeutic approaches to sexually abused children. In L. Richter, A. Dawes, & C. Higson-Smith (Eds), *Sexual abuse of young children in Southern Africa* (pp. 367-394). Cape Town, South Africa: HSRC Press.
- Kilmer, R. P., Gil-Rivas, V., Tedeschi, R. G., Cann, A., Calhoun, L. G., Buchanan, T., & Taku, K. (2009). Use of the Revised Posttraumatic Growth Inventory for Children. *Journal of Traumatic Stress*, *22*(3), 248-253. doi:10.1002/jts.20410
- King, G., Flisher, A.J., Noubary, F., Reece, R., Marais, A., & Lombard, C. (2004). Substance abuse and behavioural correlates of sexual assault among South African adolescents. *Child Abuse & Neglect*, *28*(6), 683-696. doi:10.1016/j.chiabu.2003.12.003
- Kozłowska, K., & Hanney, L. (2001). An art therapy group for children traumatized by parental violence and separation. *Clinical Child Psychology and Psychiatry*, *6*(1), 49-78. doi:10.1177/1359104501006001006
- Lev-Wiesel, R., & Liraz, R. (2007). Drawings vs narratives: Drawing as a tool to encourage verbalization in children whose fathers are drug abusers. *Clinical Child Psychology and Psychiatry*, *12*(1), 65-75. doi:10.1177/1359104507071056
- Lyshak-Stelzer, F., Singer, P., Patricia, S. J., & Chemtob, C. M. (2007). Art Therapy for Adolescents with Posttraumatic Stress Disorder Symptoms: A Pilot Study. *Art Therapy*, *24*(4), 163-169. doi:10.1080/07421656.2007.10129474
- Madu, S. N., & Peltzer, K. (2001). Prevalence and patterns of child sexual abuse and victim perpetrator relationship among secondary school students in the Northern Province (South Africa). *Archives of Sexual Behavior*, *30*(3), 311-321.

- Malchiodi, C. A. (2015). *Creative interventions with traumatized children*. New York, NY: Guilford.
- Nickerson, A., Bryant, R. A., Silove, D., & Steel, Z. (2011). A critical review of psychological treatments of posttraumatic stress disorder in refugees. *Clinical psychology review*, *31*(3), 399-417. doi:10.1016/j.cpr.2010.10.004
- Pretorius, G., & Pfeifer, N. (2010). Group art therapy with sexually abused girls. *South African Journal of Psychology*, *40*(1), 63-73. doi:10.1177/008124631004000107
- Quinlan, R., Schweitzer, R. D., Khawaja, N., & Griffin, J. (2016). Evaluation of a school based creative arts therapy program for adolescents from refugee backgrounds. *The Arts in Psychotherapy*, *47*, 72–78. doi:10.1016/j.aip.2015.09.006
- Saraceno, B., van Ommeren, M., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., ... Underhill, C. (2007). Barriers to improvement of mental health services in low income and middle-income countries. *The Lancet*, *370*(9593), 1164-1174.
- Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S. L., ... Stein, M. B. (2007). Perceived Barriers to Mental Health Service Utilization in the United States, Ontario, and the Netherlands. *Psychiatric Services*, *58*(3), 357–364. doi:10.1176/ps.2007.58.3.357
- Schnurr, P. P., Friedman, M. J., Engel, C. C., Foa, E. B., Shea, M. T., Chow, B. K, ... Bernardy, N. (2007). Cognitive behavioral therapy for posttraumatic stress disorder in women: A randomized controlled trial. *Journal of the American Medical Association*, *297*(8), 820-830. doi:10.1001/jama.297.8.820
- Seedat, S., Nyamai, C., Njenga, F., Vythilingum, B., & Stein, D. J. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools. *British Journal of Psychiatry*, *184*(2), 169-175.
- Seedat, M., van Niekerk, A. van, Jewkes, R., Suffla, S. & Ratele, K. (2009). Violence and injuries in South Africa: prioritising an agenda for prevention. *Lancet*, *374*, 1011-1022. doi:10.1016/S0140-6736(09)60948-x
- Seedat, S., Williams, D. R., Herman, A. A., Moomal, H., Williams, S. L., Jackson, P. B., ... Stein, D. J. (2009a). Mental health service use among South Africans for mood, anxiety and substance use disorders. *South African Medical Journal*, *99*(5), 346-352
- Seligman, M. E. (1995). The effectiveness of psychotherapy: The Consumer Reports study. *American psychologist*, *50*(12), 965.
- Silverman, W. K., Ortiz, C. D., Viswesvaran, C., Burns, B. J., Kolko, D. J., Putnam, F. W., & Amaya-Jackson, L. (2008). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child & Adolescent Psychology*, *37*(1), 156-183. doi:10.1080/15374410701818293
- Stuckey, H. L., & Nobel, J. (2010). The connection between art, healing, and public health: a review of current literature. *American Journal of Public Health*, *100*(2), 254. doi: 10.2105/AJPH.2008.156497
- Suliman, S., Mkabile, S. G., Fincham, D. S., Ahmed, R., Stein, D. J., & Seedat, S. (2009). Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry*, *50*(2), 121-127. doi:10.1016/j.comppsy.2008.06.006

- Ter Heide, F. J. J., Mooren, T. M., & Kleber, R. J. (2016). Complex PTSD and phased treatment in refugees: a debate piece. *European Journal of Psychotraumatology*, *7*. doi:10.3402/ejpt.v7.28687
- Tran, U. S., & Gregor, B. (2016). The relative efficacy of bona fide psychotherapies for post traumatic stress disorder: a meta-analytical evaluation of randomized controlled trials. *BMC psychiatry*, *16*(1), 266. doi:10.1186/s12888-016-0979-2
- Tol, W. A., Barbui, C., Galappattti, A., Silove, D., Betancourt, T. S., Souza, R., ... van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: linking practice and research. *The Lancet*, *378*(9802), 1–11. doi:10.1016/s0140-6736(11)61094-5
- Tol, W. A., Komproe, I. H., Jordans, M. J. D., Ndayisaba, A., Ntamutumba, P., Sipsma, H., ... de Jong, J. T. V. M. (2014). School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. *BMC Medicine*, *12*(1). doi:10.1186/1741-7015-12-56
- Ugurlu, N., Akca, L., & Acarturk, C. (2016). An art therapy intervention for symptoms of post-traumatic stress, depression and anxiety among Syrian refugee children. *Vulnerable Children and Youth Studies*, *11*(2), 89–102. doi:10.1080/17450128.2016.1181288
- Van Westrhenen, N., & Fritz, E. (2014). Creative arts therapy as treatment for child trauma: An overview. *The Arts in Psychotherapy*, *41*(5), 527-534. doi:10.1016/j.aip.2014.10.004
- Van Westrhenen, N., Fritz, E., Oosthuizen, H., Lemont, S., Vermeer, A., & Kleber, R. (2017). Creative arts in psychotherapy treatment protocol for children after trauma. *The Arts in Psychotherapy*. In press.
- Yalom, I. D., & Leszcz, M. (2008). *The Theory and Practice of Group Psychotherapy*. New York, NY: Basic Books.



9

Discussion

Levels of crime and community violence are ever-present in South Africa. Based on personal experience, everyone I met in the country has been either directly exposed to or witnessed some type of traumatic event, including violence in the street, being robbed or mugged, hijacked, or being injured, beaten, abused, hurt or killed. In the period of seven years that I lived in the country to conduct this research (2010-2016), my house and car have been broken into a number of times, although I realize it could have been much worse. Like many others, I lived in a constant state of high alertness; listening for suspicious sounds, watching out for strange people coming too close to my car, and getting a complete fright every time someone (often accidentally) sets off the house alarm. I never felt entirely safe, not even in my own house.

These ongoing stressor conditions are causing an experience of continuous chronic stress, however, so subtle that you almost get used to it. When you tell someone else that you were robbed, they respond by telling their own stories of when it happened to them or someone they know; traumatic events are being normalized. Yet, there are also many children whose experiences simply cannot and should not be normalized, such as Bonolo's experiences described in the Introduction of this dissertation; growing up in extreme poverty, being raped in your own home, and losing parents at a very young age. That just seems too much tragedy for a 9-year-old to bear. Many children like Bonolo suffer in silence, without having access to good quality mental health care and other support services.

In the current series of studies, we explored the psychological consequences of such traumatic experiences in South Africa and currently available treatments, and if and how a creative arts therapy intervention could help children like Bonolo to find some relief and support for their problems. Three main questions were investigated in this dissertation concerning the psychological consequences of adversity, challenges in South African trauma care and the effect of a creative arts therapy intervention for traumatized children. These questions and related findings will be discussed below.

A resilient society

Research question 1: What are the psychological consequences of students experiencing adversity in South Africa in terms of posttraumatic stress, PTG, and resilience?

Trauma exposure and PTSD

Through the different questionnaires and interviews that were conducted in this study it was found that trauma does leave its scars upon the South African society. Among the student population examined, 50% of those exposed to a traumatic event reported symptoms indicative for a posttraumatic stress disorder (PTSD) (Chapter 5). Social workers also reported that they feel stressed and anxious, and that they struggle to deal with the traumatic stress they are exposed to, not only through their work but also in their personal lives (Chapter 3). Moreover, there are certain cultural traditions within the South African communities that can go against the safety and rights of children (for instance when the parents sell their child to a perpetrator, an extension of the tradition called *Lebola*), adding to the burden of traumatic stress in children. Although exposure rates to trauma were relatively similar in previous studies, the finding of 50% PTSD prevalence in this study's population is considerably higher than findings from previous studies in the same context among adults (between 2.2% and 23.3%, i.e. Kaminer, Grimsrud, Myer, Stein, & Williams, 2008; Suliman et al., 2009) as well as children and adolescents (between 2.2% and 22.2%, i.e. Optimus Study, 2016; Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004).

So how come these rates were so high, and is this a true reflection of reality? On the one hand, it seems conceivable that the rates are indeed high, considering the high and continuous exposure to traumatic events (Seedat, van Niekerk, Jewkes, Suf-fla, & Ratele, 2009), especially in an opportunity sample of previously disadvantaged students growing up in extreme impoverished and unsafe circumstances. It has been shown that cumulative trauma and multiple, severe ongoing trauma (i.e. complex trauma) predict PTSD (Briere, Kaltman, & Green, 2008; Cloitre et al., 2009), and in this population these types of complex trauma can definitely be considered.

In comparison with 'the general' population, a 50% PTSD prevalence rate is extremely high. However, in comparison with more vulnerable population groups exposed to more frequent and more severe types of trauma these rates are not unique. For instance, studies with orphaned children reported PTSD prevalence rates up to 73% (Cluver, Fincham, & Seedat, 2009; Cluver & Gardner, 2006). The same is true for former child soldiers (Winkler et al., 2015) and inmates who were exposed to six or more different types of traumatic events (Briere, Agee, & Dietrich, 2016), reporting PTSD prevalence rates between 30% and 64%. Looking at the frequency and severity of traumatic experiences in South Africa, comparison to more vulnerable groups may be more appropriate; traumatic events and its mental health consequences in South Africa are severe and continuous.

On the other hand, we should consider that the variation in methods that occur across studies make it difficult to identify and compare prevalence rates (Optimus Study, 2016). Results may depend on definitions used, research instruments administered, population groups included as well as location of the study. The instrument used to establish PTSD prevalence in this study (the revised Impact of Event Scale, IES-R) has been used previously in the South African context (Cluver & Gardner, 2006; Peltzer, 2000), also reporting high incidences of PTSD (42.2% - 73%). Other instruments reported lower rates, indicating that this instrument might overestimate the PTSD diagnosis (Engelhard et al., 2007), or that other instruments underestimate PTSD prevalence. However, studies have emphasized the reliability of the instrument, also for discrimination between individuals with or without PTSD diagnosis (Beck et al. 2008). The IES-R is a self-report measure, so another explanation could relate to over-reporting by the students, and using standardized clinical interviews may help to determine validity.

Lastly, previous studies have debated about the cross-cultural validity of all PTSD symptoms as stated in the DSM (APA, 2013) (see Friedman, Resick, Bryant, & Brewin, 2011). Although avoidance is generally perceived as maladaptive and associated with long-term negative health consequences (Amstadter & Vernon, 2008; Seligowski, Lee, Bardeen, & Orcutt, 2015), some recent studies have questioned whether this is true for collectivistic cultures, arguing that the negative effects of emotional suppression are less distinct or even non-existent among individuals from these cultures (Nickerson et al., 2016; Soto, Perez, Kim, Lee, & Minnick, 2011). Moreover, contrary to expectations, the risk of developing PTSD after exposure to trauma in countries with relatively high cultural and socioeconomic vulnerabilities to adversity was found to be lower than in countries with relatively low vulnerability to adversity (Dücker, Alisic, & Brewin, 2016). This may be explained by the collectivist cultures in countries with high levels of vulnerability to adversity and the supportive community engagements that can provide sources for resilience, yet it may also be that the relative impact of a traumatic event on long-term goals in countries with low vulnerability to adversity is more substantial (Dücker et al., 2016). Results in our study did report high clinical levels of PTSD in African, Coloured, Indian, and White South Africans (see Chapter 5), suggesting its prevalence in this collectivist setting. However, these high levels of PTSD were reported in combination with high levels of PTG and resilience, suggesting a sample with also strong positive characteristics. Considering the differences in findings across settings, further research is required into PTSD and other psychological consequences of trauma across various cultures and settings with different vulnerabilities to adversity.

Posttraumatic growth and resilience

Besides the negative consequences of traumatic exposure, we found that levels of both resilience and posttraumatic growth were high in this population, and we found a positive relationship between posttraumatic growth (PTG) and PTSD (see chapter 5 of this dissertation). In the model of PTG, Tedeschi and Calhoun (1995) suggest that some degree of psychological distress after trauma is necessary in order to challenge a survivor's core beliefs, to provoke cognitive processing, change worldviews and assumptions, and result in personal growth. This would explain why high levels of distress, or PTSD, are positively associated with PTG. Yet, previous studies have produced mixed findings. Some, like ours, confirming this positive relationship (e.g. Alisic, van der Schoot, van Ginkel, & Kleber, 2008; Hall et al., 2010; Lowe, Manove, & Rhodes, 2013), where others found a negative relationship (Frazier, Conlon, & Glaser, 2001) or no (linear) relationship at all (Sleijpen, Haagen, Mooren, & Kleber, 2016).

These inconsistent findings could be illustrated by a debate on the inaccuracy of the PTG concept as currently used in self-reports. As some have argued, we may need to distinguish between two different interpretations of the PTG concept. There seems to be a difference between 'perceived and illusory' growth that is rather dysfunctional, yet often reported in self-report questionnaires, and 'actual and functional' growth associated with meaningful change and decreased distress (Frazier et al., 2009; Hobfoll et al., 2007; Zoellner & Maercker, 2006). Perceived or illusory growth has been associated with self-deception, avoidant coping and increased distress, as well as high levels of avoidance and hyperarousal PTSD symptoms (Dekel, Ein-Dor, & Solomon, 2012; Johnson et al., 2007). Our findings in the South African student sample of high levels of avoidance symptoms in combination with high levels of PTG support this hypothesis (Chapter 5).

We also found a positive relationship between PTG and resilience. The nature of the relationship between resilience and PTG in previous studies has been strongly dependent on the definition of resilience used; resilience defined as a trait was found to be positively associated with PTG (Bensimon, 2012; Duan, Guo, & Gan, 2015), resilience defined as a lack of experiencing distress or PTSD after exposure to a traumatic event was negatively associated with PTG (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009). Other than regular resilience measures, the instrument used in our study (CYRM-28) specifically considered resilience as an ecological construct, and measured culturally relevant concepts of resilience such as community support, traditions, and spirituality (Resilience Research Center, 2009). In line with the earlier reported findings by Dückers et al (2016), we confirmed that this group of students coming from a collectivist culture find strength from interpersonal relationships and the community in

times of adversity. This is a positive resource that can be emphasized in therapies for treating negative consequences of traumatic exposure.

Barriers to mental health care

Research question 2: What are some of the key challenges health care professionals are facing in their work with abused children in South Africa?

It is well known in the field of global health research that there are specific barriers to availability and attendance of mental health services in low and middle income countries, including low numbers of trained professionals, lack of funding for and prioritization of mental health care by leadership entities and the centralized location of many services complicating access (Saraceno, 2007). Moreover, although mental health problems account for about 8% of the global burden of disease, and are the third largest cause of disability adjusted life years worldwide (Whiteford et al., 2013), mental health budgets in developing countries compared to high-income countries are extremely limited (WHO, 2011).

Although the mental health services were freely available, situated within the communities and clinical levels of PTSD and other negative psychological consequences of trauma exposure reported in these communities were considered extremely high, therapy attendance was minimal, to say the least (see Chapter 7). This can be explained through several barriers to access to and quality of mental health care services.

Health seeking behaviour barriers

The complex history of South Africa, and particularly the consequences of Apartheid, as well as the unfair distribution of socio-economic resources play a huge role in current mental health care behaviour. South African clients coming from so called previously disadvantaged backgrounds show different health seeking behaviour, which can be broadly explained by a complex interaction of three reasons, related to the way health care was divided during Apartheid, the relation between poverty and health seeking behaviour, as well as cultural norms and values impacting health seeking behaviour. First, during Apartheid mental health care was hardly available or accessible for black people, and therefore mental health is often still associated with something only for white people. This as well as the unequal divide of socio-economic resources still play a huge role in mental health care behaviour in South Africa (Sorsdahl et al., 2009).

Second, poor health is often associated with low income and poverty, not only in developing countries (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003). This relationship is described by Marmot (2004) as the status syndrome; people with more material wellbeing and status have a subjective sense of control over particular life circumstances resulting in more help seeking behaviour and taking less health risks compared to people with low status. People living in poverty have a low sense of control and thus may be less likely to seek help from health care professionals, or see the benefits of such help. A related concept is that of scarcity, in which Shafir and Mullainathan (2013) describe that poverty is related to a tunnel vision by which people will mostly attend to solving their pressing problems and losing long-term vision. These same people often have a decreased capacity to deal with important but long-term problems, and thus are less likely to seek mental health care.

Third, there are cultural barriers in approaches to treatment. Most psychological treatments are based on Western health care models that are not only expensive and thus inaccessible for disadvantaged communities, but also foreign and disconnected from indigenous cultures and traditions. For instance, one trauma-focused CBT study for children in Zambia reported that participants invited for the therapy refused treatment because of the fear that the treatment was involved with Satanism (Murray et al., 2013). Although mental health care is known to be associated with negative stigma all over the world, these barriers to treatment also occur in the field of medicine. Mothers in Pakistan for instance did not comply with a free and easily available oral dehydration therapy that could save the lives of their children suffering from diarrhoea, because of cultural perspectives on diarrhoea; it was considered a natural part of growing up, or something caused by evil spirits that could only be treated through traditional healers (Mull & Mull, 1988). These barriers are complex and hard to deal with, and an increased understanding would help addressing them.

Social work barriers

The social workers who in this study were providing the mental health services also experienced significant barriers, and they reported being underpaid, undertrained, and overworked. They appeared vulnerable to developing “compassion fatigue”, struggled to deal with the high demand of traumatized clients and the complexity and severity of the cases on a personal as well a professional level. Despite efforts to overcome some of these barriers (i.e. offering training, fundraising), staff turnover was very high and therefore training had to be repeated regularly and valuable skills and experiences were continuously lost. Brain drain is one of the serious problems in the developing countries, where professional workers go and seek work abroad (Labonté

et al., 2015). As a result of these constraints, staff commitment and motivation overall seemed extremely low, negatively impacting on the quality of mental health services.

Addressing the barriers

From a researcher's perspective, all these barriers in mental health care need to be considered when attempting to improve current circumstances or introducing a new therapeutic approach. Specifically, in the field of global health, researchers have started to come to an understanding of how to overcome these barriers. Although many studies have high attrition rates (i.e. Murray et al., 2013), fortunately some studies in the low and middle income countries do succeed in successfully delivering wide-spread services (McMullen et al., 2013; O'Callaghan, McMullen, Shannon, Rafferty, & Black, 2013; O'Donnel et al., 2014). Attrition can be minimized by improving collaboration at all different levels of the actors involved and finding ways to include and convince relevant parties. Two models that are specifically relevant in this regard are the Diffusion of Innovation Model (Rogers, 2003), describing how to gradually introduce a new intervention into an existing community, and the Transtheoretical Model of Change (Prochaska, Prochaska, & Johnson, 2006) referring to the step by step process of introducing individuals to new programmes. Innovative approaches that may avoid certain barriers to access of mental health care can in this way be introduced. One suggestion that we tried was collaborating with other service providers that have high attendance and a good reputation within the community, such as a school. Unfortunately, this project had to be terminated early on due to low commitment of school staff and time constraints, yet it could be re-installed in future studies. Another suggestion relates to tapping more into online interventions, which is a potential that is still underused but could be optimized and implemented for the future (Arjadi, Nauta, Chowdhary, & Bockting, 2015).

Based on our experiences and seeing the complexity of the context and determinants of access and use of mental health care facilities, we would recommend future studies in this area to first start investigating these barriers to mental health care more in-depth, before attempting implementation of new projects. Moreover, considering the complexity and cross-disciplinary challenges in the field of child maltreatment, research in this context should be conducted using transdisciplinary research teams.

The potential of creative arts therapy

Research question 3: What is the potential effect of a creative arts therapy intervention for traumatized children on posttraumatic stress, posttraumatic growth, and behaviour problems?

This pioneering study on creative arts therapy for traumatized children in South Africa (see Chapter 8) contributed to an extremely scarce body of knowledge on the potential effectiveness of creative arts therapy in reducing negative psychological consequences in children after trauma. Despite significant contextual barriers as mentioned above impeding on full implementation and attendance of the creative arts therapy programme, we did find a decrease in hyperarousal symptoms and avoidance symptoms, in abused children attending the CAP intervention. Moreover, our qualitative study with social workers attending creative arts therapy workshops demonstrated potential benefits of group creative arts therapies for relieving stress, expressing difficult emotions, and learning to put up boundaries within a safe and contained space (Chapter 4). Our results also suggested that behaviour problems and increased posttraumatic growth improved, but these findings were not statistically significant. This could be due to the significant methodological challenges of the evaluation study, such as the high dropout rates and nonrandomization; however, it also could simply mean that this creative arts therapy intervention programme was insufficiently effective in addressing behaviour problems and increasing posttraumatic growth. It is still premature to make any final conclusions on this topic based on a sample of only 47 children. Yet, some lessons can be learned when comparing our findings to other studies.

Stabilization and trauma-focused treatment

Research studies in the field of creative arts therapy are often incomplete and subjective and there is a wide diversity in theoretical frameworks informing creative arts therapies that are used in different ways in practise (Chapter 2). Since the start of this PhD, literature supporting the effectiveness of creative arts therapy for treating child trauma has increased (see for instance Cassidy, Turnbull, & Gumley, 2014; Ho, 2015; Jiang, Rickson, & Jiang, 2016; Koch, Kunz, Lykou, & Cruz, 2014), yet it does not compare to the strong evidence base of cognitive behaviour therapies, which is therefore considered treatment of first choice (Gillies, Taylor, Gray, O'Brien, & D'Abrew, 2013). Continuous research and knowledge development is needed in order to strengthen the foundation of creative arts therapies, which can be established through increased collaboration between creative arts therapists and researchers.

In congruence with recommendations of the International Society for Traumatic Stress Studies for treatment of complex PTSD (Cloitre et al., 2012), the creative arts in psychotherapy (CAP) protocol included a phase-based approach to treatment, in which the different phases sequentially focused on establishing safety, the trauma story and returning to the community. Evaluation of phase-based treatment approaches by De Jongh and colleagues (2016), however, found insufficient evidence that a phased-based approach to therapy is necessarily better than trauma-focused treatments for complex PTSD in adults. They argue that an initial stabilization phase would unnecessarily delay access to effective trauma-focused treatment as well as underestimate the capabilities of victims to handle re-exposure (De Jongh et al., 2016). These findings have not yet been replicated for children. Moreover, in CAP, the three phases of treatment all take place over a period of ten weeks, therefore not unnecessarily delaying treatment, yet allowing for sufficient time in the beginning stage to create a safe space for children to express their traumatic experiences and emotions associated with it.

Recently, there is considerable debate about whether trauma-focused therapy, in which the primary focus is on exposing the patients to trauma-related memories, emotions and thoughts is more effective than a more supportive type of treatment not directly focused on the re-exposure of the traumatic event but rather on psychosocial stabilisation and elevating posttraumatic stress symptoms, promoting safety and developing coping skills (Ter Heide, Mooren, & Kleber, 2016). It has been found that trauma-focused treatments show higher effect sizes compared to non-trauma-focused treatments (Ehring et al., 2014), yet a recent meta-analysis showed this difference is rather small and not clinically meaningful (Tran & Gregor, 2016). Moreover, exposure therapies are also associated with an early and high dropout and patients having remaining symptoms (Kehle-Forbes et al., 2013; Schnurr et al., 2007). The CAP intervention can be considered a supportive type of treatment, generally focusing on aspects such as psychosocial stabilisation, alleviating posttraumatic stress symptoms, promoting safety and developing coping skills, combined with a few exercises indirectly facilitating re-exposure through drawing and drama (Chapter 6). Dropout rates were high, but mostly occurred in the initial phase of treatment due to practical problems and barriers reported above, and therefore dropout was probably unrelated to re-exposure elements of treatment. We encourage replication of the CAP intervention study (in a well-established community setting to avoid earlier reported barriers), incorporating a wider variety of outcome measures in a mixed-methods design, in order to better establish its effectiveness.

Psychological treatment in a context of ongoing adversity

In settings with ongoing chronic stress, such as areas of conflict and war, there has been two approaches with fundamentally different assumptions regarding understanding and addressing mental health needs (Miller & Rasmussen, 2010). Where trauma-focused approaches focus on the direct effects of the exposure to a certain traumatic event, psychosocial approaches are primarily concerned with the ongoing daily stressors such as extreme poverty, malnutrition, unemployment, and the HIV and AIDS epidemic. Although it is considered highly unlikely that solely addressing daily psychosocial stressors will result in resolution of severe traumatic stress, not all psychological treatments have been shown to be effective in a context of ongoing adversity either (Nickerson, Bryant, Silove, & Steel, 2011; Tol et al., 2011, 2014).

Therefore, it is important going forward to consider both perspectives when planning and implementing mental health interventions in such a context, not only for war and conflict areas, but also for settings such as South African townships with ongoing exposure to daily stressors and violence. In line with the guidelines proposed by Miller and Rasmussen (2010), we consider it an important first step for anyone working in this field to develop insights into the complex cross-disciplinary challenges arising in such a context. A practical example from our study was that the children came to therapy being extremely hungry, impacting on their concentration during the therapeutic activities. We quickly realized that it was impossible to treat the traumatic stress symptoms in isolation of psychosocial challenges, but struggled to find the right balance between trauma-treatment and psychosocial support, in our capacity as psychologists and researchers. Considering these complex situations in which researchers in a developing context find themselves, we came across a strong need for cross-disciplinary research initiatives working on scientific and clinical practice issues related to child maltreatment and community-based mental health interventions.

Outcome measures and mixed-methods

The instruments selected for this study were used before in studies in comparable settings in South Africa, and reliability and validity measures were published. Based on our experiences with the administration of these questionnaires, we were surprised not to find any previous comments on the limitations and problems concerning this procedure. Although it is quite common to use standardized questionnaires developed in the western world in non-western settings, there is serious doubt about their validity in settings that are different and that are also characterized by abuse and poverty (Bolton, 2001). The interplay between qualitative and quantitative forms of research should be utilized better, more systematic and more thoroughly. We therefore recom-

mend that future research in a multicultural context should consist of a mixed design to ensure cultural validity (Boeije, Slagt, & van Wesel, 2013).

Moreover, the outcome variables selected in our study were PTSD, PTG and behaviour problems. Although recent studies evaluating trauma-focused cognitive behaviour therapy for children in low and middle income countries reported positive results for reducing posttraumatic stress (McMullen et al., 2013; Morina, Malek, Nickerson, & Bryant, 2017; O'Callaghan, McMullen, Shannon, Rafferty, & Black, 2013; O'Donnel et al., 2014), most trauma treatment studies in a developing context have focused solely on PTSD and internalizing symptoms as outcome measures (Tol et al., 2011). Other outcome measures may be more relevant in a setting of poverty, hardships and crime, such as resilience, self-confidence, and social support. By elaborating on existing methods and outcome measures, we can enrich the knowledge on how to implement evidence-based treatment for traumatized and abuse children in developing countries more effectively.

Concluding remarks

The central aim of this thesis was to add knowledge on the consequences of high exposure to traumatic stress experiences in the South African society, to assess the experiences of social workers working with traumatized children and the develop and evaluate a creative arts therapy treatment for traumatized children. As a pioneering study in this field, conducting this study on child trauma and creative arts therapy in South Africa has been an invaluable but challenging journey at the same time. The different cultural, economic, political and societal influences on traumatic stress and mental health care were complex and substantial. Knowledge was gained on the effect of adversity on posttraumatic stress, posttraumatic growth and resilience, and the relationship between these variables in the South African context. Insights were developed into specific barriers to effective mental health care for maltreated children, on which we based recommendations for future studies. Lastly, the potential effectiveness of creative arts therapy for traumatized children was demonstrated, which adds to the scarce body of literature in this field of research and practise and hopefully inspires more work in this area.

References

- Alisic, E., van der Schoot, T. A. W., van Ginkel, J. R., & Kleber, R. J. (2008). Looking beyond PTSD in children: Posttraumatic stress reactions, posttraumatic growth, and quality of life in a general population sample. *Journal of Clinical Psychiatry, 69*, 1455-1462. doi:10.4088/jcp.v69n0913
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Amstadter, A. B., & Vernon, L. L. (2008). A preliminary examination of thought suppression, emotion regulation, and coping in a trauma-exposed sample. *Journal of aggression, maltreatment & trauma, 17*(3), 279-295. doi:10.1080/10926770802403236
- Arjadi, R., Nauta, M. H., Chowdhary, N., & Bockting, C. L. H. (2015). A systematic review of online interventions for mental health in low and middle income countries: a neglected field. *Global Mental Health, 2*. doi:10.1017/gmh.2015.10
- Beck, J. G., Grant, D. M., Read, J. P., Clapp, J. D., Coffey, S. F., Miller, L. M., & Palyo, S. A. (2008). The Impact of Event Scale-Revised: Psychometric properties in a sample of motor vehicle accident survivors. *Journal of Anxiety Disorders, 22*(2), 187-198. doi:10.1016/j.janxdis.2007.02.007
- Bensimon, M. (2012). Elaboration on the association between trauma, PTSD, and posttraumatic growth: the role of trait resilience. *Personality and Individual Differences, 52*(7), 782-787. doi:10.1016/j.paid.2012.01.011
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public health reports, 118*(4), 293-302. doi:10.1016/s0033-3549(04)50253-4
- Boeije, H., Slagt, M., & van Wesel, F. (2013). The contribution of mixed methods research to the field of childhood trauma: A narrative review focused on data integration. *Journal of Mixed Methods Research, 7*(4), 347-369. doi:10.1177/1558689813482756
- Bolton, P. (2001). Cross-cultural validity and reliability testing of a standard psychiatric assessment instrument without a Gold Standard. *Journal of Nervous & Mental Disease, 189*(4), 238-242. doi:10.1097/00005053-200104000-00005
- Briere, J., Agee, E., & Dietrich, A. (2016). Cumulative trauma and current posttraumatic stress disorder status in general population and inmate samples. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(4), 439-446. doi:10.1037/tra0000107
- Briere, J., Kaltman, S., & Green, B. L. (2008). Accumulated childhood trauma and symptom complexity. *Journal of Traumatic Stress, 21*(2), 223-226. doi:10.1002/jts.20317
- Cassidy, S., Turnbull, S., & Gumley, A. (2014). Exploring core processes facilitating therapeutic change in Dramatherapy: A grounded theory analysis of published case studies. *The Arts in Psychotherapy, 41*(4), 353-365. doi:10.1016/j.aip.2014.07.003
- Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22*(5), 399-408. doi:10.1002/jts.20444

- Cloitre, M., Courtois, C. A., Ford, J. D., Green, B. L., Alexander, P., Briere, J., ... Van der Hart, O. (2012). The ISTSS Expert Consensus Treatment Guidelines for Complex PTSD in Adults. Retrieved from http://www.istss.org/ISTSS_Main/media/Documents/ISTSS-Expert-Concesnsus-Guidelines-for-Complex-PTSD-Updated-060315.pdf
- Cluver, L., Fincham, D. S. & Seedat, S. (2009). Posttraumatic stress in AIDS orphaned children exposed to high levels of trauma: The protective role of perceived social support. *Journal of Traumatic Stress, 22*(2), 106-112. doi:10.1002/jts.20396
- Cluver, L., & Gardner, F. (2006). The psychological well-being of children orphaned by AIDS in Cape Town, South Africa. *Annals of General Psychiatry, 5*(1), 8.
- Dekel, S., Ein-Dor, T., & Solomon, Z. (2012). Posttraumatic growth and posttraumatic distress: A longitudinal study. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(1), 94.
- Duan, W., Guo, P., & Gan, P. (2015). Relationships among Trait Resilience, Virtues, Post traumatic Stress Disorder, and Posttraumatic Growth. *PLoS ONE, 10*(5), e0125707. doi:10.1371/journal.pone.0125707
- Dückers, M. L., Alisic, E., & Brewin, C. R. (2016). A vulnerability paradox in the cross-national prevalence of post-traumatic stress disorder. *The British Journal of Psychiatry, 209*(4), 300–305. doi:10.1192/bjp.bp.115.176628
- Ehring, T., Welboren, R., Morina, N., Wicherts, J. M., Freitag, J., & Emmelkamp, P. M. (2014). Meta-analysis of psychological treatments for posttraumatic stress disorder in adult survivors of childhood abuse. *Clinical Psychology Review, 34*(8), 645-657. doi:10.1016/j.cpr.2014.10.004
- Engelhard, I. M., Van Den Hout, M. A., Weerts, J., Arntz, A., Hox, J. J., & McNally, R. J. (2007). Deployment-related stress and trauma in Dutch soldiers returning from Iraq. *The British Journal of Psychiatry, 191*(2), 140-145. doi:10.1192/bjp.bp.106.034884
- Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of consulting and clinical psychology, 69*(6), 1048-1055. doi:10.1037/0022-006x.69.6.1048
- Frazier, P., Tennen, H., Gavian, M., Park, C., Tomich, P., & Tashiro, T. (2009). Does self reported posttraumatic growth reflect genuine positive change? *Psychological Science, 20*(7), 912-919. doi:10.1111/j.1467-9280.2009.02381.x
- Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM 5. *Depression and anxiety, 28*(9), 750-769. doi:10.1002/da.20767
- Gillies, D., Taylor, F., Gray, C., O'Brien, L., & D'Abrew, N. (2013). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents (Review). *Evidence-Based Child Health: A Cochrane Review Journal, 8*(3), 1004- 1116. doi:10.1002/14651858.cd006726.pub2
- Hall, B. J., Hobfoll, S. E., Canetti, D., Johnson, R., Palmieri, P., & Galea, S. (2010). Exploring the association between posttraumatic growth and PTSD: A national study of Jews and Arabs during the 2006 Israeli-Hezbollah War. *Journal of Nervous and Mental Disease, 198*(3), 180-186. doi:10.1097/nmd.0b013e3181d1411b

- Ho, R. T. H. (2015). A place and space to survive: A dance/movement therapy program for childhood sexual abuse survivors. *The Arts in Psychotherapy, 46*, 9-16. doi:10.1016/j.aip.2015.09.004
- Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., Johnson, R. J., & Palmieri, P. A. (2007). Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology, 56*(3), 345-366. doi:10.1111/j.1464-0597.2007.00292.x
- Jiang, J., Rickson, D., & Jiang, C. (2016). The mechanism of music for reducing psychological stress: Music preference as a mediator. *The Arts in Psychotherapy, 48*, 62–68. doi:10.1016/j.aip.2016.02.002
- Johnson, R. J., Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., & Palmieri, P. A. (2007). Post-traumatic growth: Action and reaction. *Applied Psychology, 56*(3), 428-436. doi:10.1111/j.1464-0597.2007.00296.x
- Jongh, A., Resick, P. A., Zoellner, L. A., Minnen, A., Lee, C. W., Monson, C. M., ... Rauch, S. A. (2016). Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depression and anxiety, 33*(5), 359–369. doi:10.1002/da.22469
- Kaminer, D., Grimsrud, A., Myer, L., Stein, D. J., & Williams, D. R. (2008). Risk for post-traumatic stress disorder associated with different forms of interpersonal violence in South Africa. *Social Science & Medicine, 67*, 1589-1595. doi:10.1016/j.socscimed.2008.07.023
- Kehle-Forbes, S. M., Polusny, M. A., MacDonald, R., Murdoch, M., Meis, L. A., & Wilt, T. J. (2013). A systematic review of the efficacy of adding nonexposure components to exposure therapy for posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy, 5*(4), 317–322. doi:10.1037/a0030040
- Koch, S., Kunz, T., Lykou, S., & Cruz, R. (2014). Effects of dance movement therapy and dance on health-related psychological outcomes: A meta-analysis. *The Arts in Psychotherapy, 41*(1), 46–64. doi:10.1016/j.aip.2013.10.004
- Labonté, R., Sanders, D., Mathole, T., Crush, J., Chikanda, A., Dambisya, Y., ... Bourgeault, I. L. (2015). Health worker migration from South Africa: causes, consequences and policy responses. *Human Resources for Health, 13*(1). doi:10.1186/s12960-015-0093-4
- Levine, S. Z., Laufer, A., Stein, E., Hamama-Raz, Y., & Solomon, Z. (2009). Examining the relationship between resilience and posttraumatic growth. *Journal of Traumatic Stress, 22*(4), 282–286. doi:10.1002/jts.20409
- Lowe, S. R., Manove, E. E., & Rhodes, J. E. (2013). Posttraumatic stress and posttraumatic growth among low-income mothers who survived Hurricane Katrina. *Journal of consulting and clinical psychology, 81*(5), 877–889. doi:10.1037/a0033252
- Marmot, M. (2004). *Status syndrome*. London: England: Bloomsbury.
- McMullen, J., O'Callaghan, P., Shannon, C., Black, A., & Eakin, J. (2013). Group trauma focused cognitive-behavioural therapy with former child soldiers and other war affected boys in the DR Congo: A randomized controlled trial. *Journal of Child Psychology and Psychiatry, 54*(11), 1231–1241. doi:10.1111/jcpp.12094

- Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: bridging the divide between trauma-focused and psychosocial frameworks. *Social science & medicine*, *70*(1), 7-16. doi:10.1016/j.socscimed.2009.09.029
- Morina, N., Malek, M., Nickerson, A., & Bryant, R. A. (2017). Psychological interventions for post-traumatic stress disorder and depression in young survivors of mass violence in low- and middle-income countries: meta-analysis. *The British Journal of Psychiatry*, *210*(4), 247-254. doi:10.1192/bjp.bp.115.180265
- Mull, J. D., & Mull, D. S. (1988). Mothers' concepts of childhood diarrhea in rural Pakistan: what ORT program planners should know. *Social science & medicine*, *27*(1), 53-67.
- Murray, L. K., Familiar, I., Skavenski, S., Jere, E., Cohen, J., Imasiku, M., ... Bolton, P. (2013). An evaluation of trauma focused cognitive behavioral therapy for children in Zambia. *Child abuse & neglect*, *37*(12), 1175-1185. doi:10.1016/j.chiabu.2013.04.017
- Nickerson, A., Bryant, R. A., Silove, D., & Steel, Z. (2011). A critical review of psychological treatments of posttraumatic stress disorder in refugees. *Clinical psychology review*, *31*(3), 399-417. doi:10.1016/j.cpr.2010.10.004
- Nickerson, A., Garber, B., Ahmed, O., Asnaani, A., Cheung, J., Hofmann, S. G., ... Bryant, R. A. (2016). Emotional suppression in torture survivors: Relationship to posttraumatic stress symptoms and trauma-related negative affect. *Psychiatry research*, *242*, 233- 239. doi:10.1016/j.psychres.2016.05.048
- O'Callaghan, P., McMullen, J., Shannon, C., Rafferty, H., & Black, A. (2013). A randomized controlled trial of trauma-focused cognitive behavioral therapy for sexually exploited, war-affected Congolese girls. *Journal of the American Academy of Child & Adolescent Psychiatry*, *52*, 359-369. doi:10.1016/j.jaac.2013.01.013
- O'Donnell, K., Dorsey, S., Gong, W., Ostermann, J., Whetten, R., Cohen, J. A., ... Whetten, K. (2014). Treating Maladaptive Grief and Posttraumatic Stress Symptoms in Orphaned Children in Tanzania: Group-Based Trauma-Focused Cognitive-Behavioral Therapy. *Journal of traumatic stress*, *27*(6), 664-671. doi:10.1002/jts.21970
- Optimus Study (2016). *Sexual victimisation of children in South Africa Final report of the Optimus Foundation Study: South Africa*. Zurich, Switzerland: UBS Optimus Foundation.
- Peltzer, K. (2000). Trauma symptom correlates of criminal victimization in an urban community sample, South Africa. *Journal of Psychology in Africa*, *10*(1), 49-62.
- Prochaska, J. M., Prochaska, J. O., & Johnson, S. S. (2006). Assessing readiness for adherence to treatment. *Promoting treatment adherence: A practical handbook for health care providers*, 35-46. doi:10.4135/9781452225975.n3
- Resilience Research Center. (2009). *The child and youth resilience measure-28: User manual*. Halifax, NS: Resilience Research Center, Dalhousie University.
- Rogers, E. M. (2003). *Diffusion of innovations, 5th edition*. New York, NY: Free Press.
- Saraceno, B., van Ommeren, M., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., ... & Underhill, C. (2007). Barriers to improvement of mental health services in low income and middle-income countries. *The Lancet*, *370*(9593), 1164-1174. doi:10.1016/s0140-6736(07)61263-x

- Seedat, S., Nyamai, C., Njenga, F., Vythilingum, B., & Stein, D. J. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools. *The British Journal of Psychiatry*, *184*(2), 169-175. doi:10.1192/bjp.184.2.169
- Seedat, M., van Niekerk, A. van, Jewkes, R., Suffla, S. & Ratele, K. (2009). Violence and injuries in South Africa: prioritising an agenda for prevention. *Lancet*, *374*, 1011- 1022. doi:10.1016/s0140-6736(09)60948-x
- Seligowski, A. V., Lee, D. J., Bardeen, J. R., & Orcutt, H. K. (2015). Emotion regulation and post-traumatic stress symptoms: A meta-analysis. *Cognitive behaviour therapy*, *44*(2), 87-102. doi:10.1080/16506073.2014.980753
- Schnurr, P. P., Friedman, M. J., Engel, C. C., Foa, E. B., Shea, M. T., Chow, B. K, ... Bernardy, N. (2007). Cognitive behavioral therapy for posttraumatic stress disorder in women: A randomized controlled trial. *Journal of the American Medical Association*, *297*(8), 820-830. doi:10.1001/jama.297.8.820
- Sorsdahl, K, Stein, D. J., Grimsrud, A., Seedat, S, Flisher, A.J., Williams, D., & Myer, L. (2009). Traditional healers in the treatment of common mental disorders in South Africa. *The Journal of Nervous and Mental Disease*, *197*(6), 434-441. doi:10.1097/nmd.0b013e3181a61dbc
- Soto, J. A., Perez, C. R., Kim, Y. H., Lee, E. A., & Minnick, M. R. (2011). Is expressive suppression always associated with poorer psychological functioning? A cross-cultural comparison between European Americans and Hong Kong Chinese. *Emotion*, *11*(6), 1450-1455. doi:10.1037/a0023340
- Shafir, E., & Mullainathan, S. (2013). *Scarcity: Why having too little means so much*. New York, NY: Times Books.
- Sleijpen, M., Haagen, J., Mooren, T., & Kleber, R. J. (2016). Growing from experience: an exploratory study of posttraumatic growth in adolescent refugees. *European Journal of Psychotraumatology*, *7*. doi:10.3402/ejpt.v7.28698
- Suliman, S., Mkabile, S. G., Fincham, D. S., Ahmed, R., Stein, D. J., & Seedat, S. (2009) Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry*, *50*(2), 121-127. doi:10.1016/j.compsych.2008.06.006
- Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma and transformation: Growing in the aftermath of suffering*. Thousand Oaks, CA: Sage Publications.
- Ter Heide, F. J. J., Mooren, T. M., & Kleber, R. J. (2016). Complex PTSD and phased treatment in refugees: a debate piece. *European Journal of Psychotraumatology*, *7*. doi:10.3402/ejpt.v7.28687
- Tran, U. S., & Gregor, B. (2016). The relative efficacy of bona fide psychotherapies for post traumatic stress disorder: a meta-analytical evaluation of randomized controlled trials. *BMC psychiatry*, *16*(1), 266. doi:10.1186/s12888-016-0979-2
- Tol, W. A., Barbui, C., Galappattti, A., Silove, D., Betancourt, T. S., Souza, R., ... van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: linking practice and research. *Lancet*, *378*(9802), 1581-1591. doi:10.1016/s0140-6736(11)61094-5

- Tol, W. A., Komproe, I. H., Jordans, M. J. D., Ndayisaba, A., Ntamutumba, P., Sipsma, H., ... de Jong, J. T. V. M. (2014). School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. *BMC Medicine*, *12*(1), 56. doi:10.1186/1741-7015-12-56
- Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, et al. (2013) Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet*. *382*(9904):1575–86. doi: 10.1016/S0140-6736(13)61611-6.
- Winkler, N., Ruf-Leuschner, M., Ertl, V., Pfeiffer, A., Schalinski, I., Ovuga, E., ... Elbert, T. (2015). From War to Classroom: PTSD and Depression in Formerly Abducted Youth in Uganda. *Frontiers in Psychiatry*, *6*. doi:10.3389/fpsy.2015.00002
- World Health Organization. (2011) Mental Health Atlas 2011. Geneva: World Health Organization. http://whqlibdoc.who.int/publications/2011/9799241564359_eng.pdf Accessed December 17, 2016.
- Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology: A critical review and introduction of a two component model. *Clinical Psychology Review*, *26*(5), 626–653. doi:10.1016/j.cpr.2006.01.008



10

Summary

Chapter 1. Traumatic stress and specifically child trauma is a ubiquitous problem, and in South Africa rates of abuse and trauma exposure are one of the highest worldwide. Considering these high figures, there is actually limited theories available that can help us understand the long-term consequences of posttraumatic stress in children or knowledge of long term evidence-based treatment thereof. Moreover, previous studies are primarily based in a high-income context; in low and middle income countries studies are even more scarce. This dissertation described the psychological impact of traumatic events in South Africa, analysed current barriers in mental health care through the experiences of social workers, and evaluated the potential suitability and effectiveness of a creative arts in psychotherapy intervention that was developed, implemented and evaluated in the South African context. The knowledge gap on child trauma and creative arts therapy, and the alarming figures of children exposed to traumatizing events, served as motivation for this current dissertation. The overall aim was to contribute to an improvement in mental health care offered to children after trauma, specifically in a context characterized by high levels of abuse, violence, crime and poverty.

Chapter 2. A review of studies published between 2000 and 2012 identified 38 articles describing the effect of creative arts therapy for children after trauma. Evaluation of the methodology concluded that only 21 articles were considered empirical and 17 articles were merely descriptive of the therapist's or the child's personal experience. These non-empirical articles were using an unstructured method of data collection and were often lacking a detailed description of the case, resulting in these studies not adding in a pragmatic way to the already scarce knowledge base of creative arts therapy interventions with children after trauma. These review findings highlighted the need for more studies and improved research methodologies, which can be accomplished through increased collaboration of art therapists and researchers, resulting in the refinement of a theoretical framework and better alignment of evidence-based treatment approaches in the field of creative arts therapies.

Chapter 3. In order to explore the experiences of social workers working in the field of trauma, eight semi-structured interviews were conducted with social workers. Results highlighted that compassion fatigue, or in this specific case the burden of the high case load in combination with the traumatic nature of the work, was considered a key barrier in their work. It was found that there was a severe lack in training and supervision impacting on the ability for social workers to cope with this case load and being effective in their work. Moreover, certain contradicting cultural values and traditions between the social workers and their clients, some of which were doing injustice to children's rights, complicated treatment adherence and efficiency and formed an

additional source of distress. It was concluded that there is an urgent need for continuous professional development, including supervision and context specific knowledge. This is considered a key step towards achieving high quality mental health care for the many victims of child trauma in South Africa.

Chapter 4. One of the initiatives in South Africa trying to support social workers at risk for compassion fatigue was evaluated. This programme included nineteen social workers from nine different NGO's, who were trained as trainers in creative arts therapy workshops over eleven days in total. Qualitative evaluation was conducted using interviews, observations, and a research journal. Findings showed that the training provided a platform for communication and creativity, and through the arts the social workers explored their own traumatic experiences, discovered the need for self-care, the importance of setting personal boundaries to protect against burning out, and they found support within the group. Evaluation of the workshops illustrated that through activities embedded in indigenous systems, effective support could be provided to social workers, as well as their clients.

Chapter 5. In order to explore the psychological consequences of experiencing adversity in South Africa, a survey was conducted with 157 university students who had experienced a traumatic event. Findings showed that these students reported relative high levels of resilience and posttraumatic growth after experiencing adversity, but also relative high levels of posttraumatic stress with half of the group meeting the diagnostic criteria for posttraumatic stress disorder (PTSD). Students put a lot of emphasis on individual coping, scored high on avoidant behaviour, and scored low on social care and peer support. Results supported findings from previous studies in different contexts about the positive relationship between PTSD and PTG, and between PTSD and resilience. It was concluded that traumatic stress in South Africa is severe and negative consequences should be addressed in suitable treatments. The high levels of resilience and the positive relationship between resilience and PTG could be used as resources and strengths in interventions, in order to improve mental health in this population.

Chapter 6. Based on the results describing the experiences of social workers and the responses of students to adversity in South Africa, and in collaboration with local social workers, psychologists and creative therapists, the creative arts in psychotherapy (CAP) treatment protocol has been developed. This protocol aimed to enhance children's psychological wellbeing and strengthen positive development after trauma. The protocol combined principles of group dynamics and multimodal arts activities in order to facilitate healing through the three stages of the trauma recovery model;

creating a safe space, telling the trauma story, and preparing the children to return to the community. The programme prescribed ten 90-minute sessions for groups of six to eight children in the age between 8 to 12 years, and can be considered an addition to the available (creative) treatments for traumatized children. Treatment rationale, outline and session breakdown are provided, supported by relevant literature, practical examples and a case study.

Chapter 7. Subsequently, the potential suitability of this programme was further explored in a pilot study, implementing the CAP treatment in a child abuse clinic in Johannesburg, South Africa. Three major challenges were identified; dropout was high (58.7%) based on limitations with accessibility of the therapy, some facilitator's lacked skills and commitment to the programme impeding the quality of delivery, and the suitability of the instruments used to evaluate the programme was questioned. Moreover, it was discussed how therapeutic interventions such as the CAP treatment fit in an environment with chronic problems such as extreme poverty and ongoing stress. Lessons learned would further inform the continuous improvement of the protocol and implementation thereof.

Chapter 8. The potential effects of this creative arts therapy treatment (CAP) were evaluated in a non-randomized controlled trial with 125 children in the age between 7 and 13 years, comparing creative arts therapy with a low-level supportive programme without treatment. In total 47 children completed the programme and questionnaires assessing posttraumatic stress, posttraumatic growth and behaviour problems both at baseline and follow-up; 23 in the treatment group and 24 in the control group. In spite of severe challenges implementing and executing this pioneering study in underprivileged areas of South Africa, support was found for creative arts therapy significantly reducing hyperarousal and avoidance symptoms, more than in the control group. Behavioural problems also reduced and posttraumatic growth slightly increased, but there was no significant difference between the two conditions. These results added to the debate on the efficiency of non-trauma-focused, or stabilizing treatments for traumatised children, and the potential positive outcomes of such treatments in a context characterized by violence and continuous trauma.

Chapter 9. In conclusion, it seems that high levels of traumatic exposure in the South African society do indeed place the population at risk for developing posttraumatic stress disorder and other negative mental health consequences. There are several barriers to providing proper mental health care, pointing to a need for better support and training for the health care professionals and stronger collaboration within the communities to make treatments work. At the same time, opportunities were pointed

out such as high levels of resilience, transdisciplinary collaboration, and using strategies that are embedded in indigenous systems such as creative arts therapy. This study contributed knowledge and experience towards the evidence-base on creative arts therapy for child trauma. The positive findings laid a first foundation for similar work that can be followed-up and improved in future, and hopefully inspire much more work in this area.

Samenvatting (Summary in Dutch)

Hoofdstuk 1. Traumatische stress en trauma bij kinderen zijn universele problemen. In Zuid-Afrika is de prevalentie van misbruik en trauma een van de hoogste ter wereld. Ondanks deze hoge statistieken zijn er verrassend weinig theorieën beschikbaar die inzicht geven in de langetermijnevolgen van posttraumatische stress onder kinderen en is er weinig bewijs voor de mogelijke langetermijneffecten van behandelingen voor psychotrauma. Bovendien zijn de meeste studies tot op heden uitgevoerd in hoge-inkomenslanden; in lage- en middeninkomenslanden zijn dergelijke studies nog schaars. Dit proefschrift beschrijft de psychologische impact van traumatische ervaringen in Zuid-Afrika, analyseert huidige barrières in de geestelijke gezondheidszorg door middel van een analyse van ervaringen van maatschappelijk werkers werkzaam in de psychotrauma zorg en evalueert de mogelijke geschiktheid en effectiviteit van een programma creatieve therapie, ontwikkeld, geïmplementeerd en geëvalueerd in de Zuid-Afrikaanse context. Het gebrek aan wetenschappelijke kennis over trauma bij kinderen en creatieve therapie en de alarmerende hoge aantallen kinderen die worden blootgesteld aan traumatische gebeurtenissen in Zuid-Afrika, dienen als motivatie voor dit proefschrift. Het primaire doel was om bij te dragen aan een verbetering in de geestelijke gezondheidszorg voor kinderen die een trauma hebben meegemaakt, specifiek in een context gekenmerkt door extreem hoge aantallen misbruik, geweld, criminaliteit en armoede.

Hoofdstuk 2. Een review van studies gepubliceerd tussen 2000 en 2012 resulteerde in de selectie van 38 artikelen die de effecten van creatieve therapie voor getraumatiseerde kinderen beschrijven. Uit de evaluatie van de methoden van deze studies werd geconcludeerd dat slechts 21 artikelen konden worden beschouwd als zijnde empirisch en 17 artikelen vooral bestonden uit een omschrijving van de persoonlijke ervaringen van de therapeut of van de kinderen in therapie. Deze niet-empirische artikelen maakten gebruik van ongestructureerde methoden van data verzamelen en het ontbrak vaak aan een gedetailleerde casusomschrijving, met als gevolg dat deze studies niet op een pragmatische manier bij konden dragen aan de reeds schaarse hoeveelheid kennis beschikbaar op het gebied van creatieve therapie voor kinderen na trauma. Bovenstaande resultaten onderschrijven de behoefte voor meer studies en betere onderzoeksmethoden, hetgeen onder andere kan worden bereikt door meer samenwerking tussen creatief therapeuten en onderzoekers. Meer onderzoek is nodig en kan bijdragen aan een verbetering van de wetenschappelijke onderbouwing en theoretische basis van het gebruik van creatieve therapie.

Hoofdstuk 3. Acht semigestructureerde interviews zijn afgenomen bij maatschappelijk werkers met als doel om hun werkervaringen en mogelijke barrières in de huidige geestelijke gezondheidszorg te onderzoeken. Resultaten benadrukten dat compassie

fatigue, gedefinieerd als de hoge werkdruk veroorzaakt door het groot aantal cliënten in combinatie met de traumatische aard van hun werk, een belangrijke barrière was. Tevens werd gerapporteerd dat er een groot gebrek aan training en supervisie was, wat een negatief effect had op de efficiëntie en effectiviteit van de behandelingen. Bovendien werd de effectiviteit van behandeling bemoeilijkt door een verschil in culturele waarden en tradities tussen de maatschappelijk werkers en de cliënten en bleek dat sommige culturele tradities in tegenstrijd zijn met de rechten van het kind. Dit leverde de maatschappelijk werkers veel extra stress op. De conclusie was dat er een urgente behoefte is aan continue professionele ontwikkeling, inclusief supervisie en context specifieke kennis. Dit werd beschouwd als een belangrijke stap om een verhoogde kwaliteit van de geestelijke gezondheidszorg te bewerkstelligen voor de vele slachtoffers van trauma onder kinderen in Zuid-Afrika.

Hoofdstuk 4. Een ondersteunend programma voor Zuid-Afrikaanse maatschappelijk werkers die risico lopen op compassion fatigue werd geëvalueerd. Deze studie ging over 19 maatschappelijk werkers van 9 verschillende NGO's die 11 dagen lang een training volgden in creatieve therapie. Een kwalitatieve evaluatie werd gebruikt, met interviews, observaties en onderzoekaantekeningen. Resultaten illustreerden dat de training een platform bood voor communicatie en creativiteit en dat de maatschappelijk werkers middels artistieke mediums hun traumatische ervaringen konden verwerken. De maatschappelijk werkers ontdekten de behoefte om beter voor hun eigen mentale gezondheid te zorgen, het belang van het aangeven van grenzen om zichzelf te beschermen tegen burn-out en ze vonden veel steun binnen de groep. Evaluatie van deze training demonstreerde dat creatieve activiteiten die aansluiten bij inheemse kennissystemen een effectieve steun kunnen bieden aan zowel maatschappelijk werkers als hun cliënten.

Hoofdstuk 5. Het doel van deze studie was om de psychologische gevolgen te onderzoeken van het ervaren van een traumatische gebeurtenis in Zuid-Afrika. Een vragenlijst werd afgenomen bij 157 studenten op de universiteit die allemaal een traumatische gebeurtenis hadden meegemaakt. De resultaten lieten zien dat deze studenten een relatief hoog niveau van veerkracht hadden, evenals posttraumatische groei (PTG) na het ervaren van trauma. Maar tegelijkertijd rapporteerden ze een hoog niveau van posttraumatische stress. Meer dan de helft van de groep voldeed aan de criteria voor een posttraumatische stressstoornis (PTSS). De studenten hadden individuele copingstrategieën, toonden vermijdingsgedrag en gaven aan weinig sociale steun te onderkennen. De resultaten bevestigden eerdere bevindingen van studies uit verschillende contexten over een positieve relatie tussen PTSS en PTG, en tussen PTSS en veerkracht. De conclusie is dat posttraumatische stress een serieus probleem is in Zuid-Afrika en

dat de negatieve effecten ervan moeten leiden tot passende behandelingen. De grote veerkracht van de studenten en de positieve relatie tussen veerkracht en PTG zouden ingezet kunnen worden als hulpbron tijdens interventies om de geestelijke gezondheid van deze populatie te bevorderen.

Hoofdstuk 6. In samenwerking met lokale maatschappelijk werkers, psychologen en creatief therapeuten en naar aanleiding van de analyse van de ervaringen van de maatschappelijk werkers en de reacties van de studenten in Zuid-Afrika op trauma, is een creatief therapieprotocol (CAP) ontwikkeld. Het doel van dit protocol is om het psychologisch welzijn van de kinderen na trauma te verbeteren en psychisch herstel te bevorderen. Het protocol combineert principes van groepstherapie en multimodale creatieve activiteiten om herstel te faciliteren via drie stadia: het creëren van een veilige omgeving, het vertellen van het traumatische verhaal en de kinderen voorbereiden om terug te gaan naar hun eigen leefgemeenschap. Het programma beschrijft tien sessies van 90 minuten voor groepen van zes tot acht kinderen in de leeftijd van 8 tot 12 jaar en kan worden beschouwd als een aanvulling op reeds beschikbare (creatieve) behandelingen voor getraumatiseerde kinderen. Motivatie voor behandeling, de opzet van de behandeling en de sessies worden besproken, ondersteund door relevante literatuur, praktische voorbeelden en een casus.

Hoofdstuk 7. Vervolgens werd de geschiktheid van het creatief therapieprogramma getest in een pilotstudie in een kliniek in Johannesburg, Zuid-Afrika. Drie grote uitdagingen werden geïdentificeerd tijdens deze pilotstudie: er vielen veel kinderen uit (58.7%) vanwege problemen met de toegankelijkheid van de therapie, sommige behandelaren hadden onvoldoende vaardigheden en inzet, wat de kwaliteit van de behandeling ernstig belemmerde en de onderzoekers hadden vraagtekens bij de toepasbaarheid van de vragenlijsten gebruikt voor evaluatie van de therapie. Bovendien werd er een kritische aantekening geplaatst bij de vraag hoe therapeutische interventies zoals de CAP passen in een omgeving met chronische problemen zoals extreme armoede en aanhoudende stress. De ervaringen van deze pilotstudie resulteerden in belangrijke inzichten die gebruikt konden worden voor het verder ontwikkelen van het behandelprotocol en de implementatie ervan.

Hoofdstuk 8. De potentiële effecten van de creatieve therapie werden geëvalueerd in een niet-gerandomiseerde controle trial met 125 kinderen in de leeftijd van 7 tot 13 jaar, in vergelijking met een laagdrempelig ondersteunend programma zonder behandeling. Er waren in totaal 47 kinderen die het programma afmaakten en alle vragenlijsten zowel voor als na de behandeling invulden over posttraumatische stress, posttraumatische groei en gedragsproblemen, 23 kinderen in de therapiegroep en 24

kinderen in de controlegroep. Ondanks vele uitdagingen bij het implementeren en uitvoeren van deze innovatieve studie in kansarme wijken van Zuid-Afrika werd bewijs gevonden dat hyperarousal en vermijdingssymptomen van posttraumatische stress significant meer afnamen bij de kinderen die de creatieve therapie volgden, dan bij de kinderen die het ondersteunende programma zonder behandeling deden. Gedragsproblemen namen ook af en posttraumatische groei nam toe, maar er was geen significant verschil tussen de twee condities in de studie. Deze resultaten droegen bij aan het debat over de efficiëntie van stabiliserende behandelingen die niet direct op het herbeleven van trauma focussen en de mogelijke positieve bijdrage van dergelijke behandelingen in een context gekenmerkt door geweld en aanhoudend trauma.

Hoofdstuk 9. Concluderend lijkt het erop dat veel blootstelling aan traumatische gebeurtenissen in de Zuid-Afrikaanse populatie ervoor zorgt dat deze mensen een verhoogd risico hebben op het ontwikkelen van een posttraumatische stressstoornis en andere negatieve psychische problematiek. Er zijn verscheidene barrières in het huidige systeem die het verstrekken van effectieve geestelijke gezondheidszorg belemmeren, wat duidt op een behoefte aan verbeterde steun en training voor personeel in de gezondheidszorg en een sterkere samenwerking tussen de verschillende belanghebbenden. Tegelijkertijd werden mogelijkheden aangeduid zoals het hoge niveau van veerkracht onder studenten, transdisciplinaire samenwerking en het inzetten van strategieën die ingebed zijn in inheemse kennisystemen, waaronder creatieve therapie. Deze studie droeg kennis en ervaring bij aan de evidence-base van creatieve therapie voor kinderen na trauma. Deze positieve bevindingen leggen een eerste basis voor soortgelijke studies die voort kunnen bouwen op de resultaten van dit proefschrift en kunnen, met een verbeteringslag in de methoden voor deze uitdagende context, hopelijk een inspiratie vormen voor vervolgonderzoek.

Acknowledgements

African proverb: “If you want to go fast, go alone. If you want to go far, go together.”

I wish to express my sincere gratitude to the following people and organizations who provided me with tremendous support along the way. Thank you...

... to my dear family and friends: Johann, for your endless support and encouragement, for your patience and looking after me when I worked over the weekends, providing reassurance when I was stressed, having brilliant plan B strategies when I got stuck, celebrating milestones with me, administering questionnaires when I needed a helping hand, and so much more. Papa, mama and Anouk, for providing me the strongest foundation, skills and values enabling all this work to happen. It is so comforting to know I have your support to fall back on any time. Blikkies, Rene, Inge, Tertia, Margot and family, for your encouragement, wisdom, and loving care. Nigel and Jolinda and family, for providing me with a home away from home. Kees, Marlies, Sharon H., Tamara, Arend, Christel, Noreen, Roderik, Laura, Jonathan, Sharon R., Mthokozisi, for your emotional support, cheering and fun distractions from all the work.

... to my Utrecht University supervisors: Rolf Kleber, for your dedication towards and trust in this project, and all long-distance supervision phone calls and e-mails. You provided me with new insights and continuous critical feedback allowing me to push myself and the dissertation to an even higher academic level than I imagined possible. Paul Boelen, for coming on board providing that final push to help me reach the finish line.

... co-supervisors: Elzette Fritz, for all your advice, expertise, time and care. By inviting me to work with you on the Dedel’ingoma project and by setting a great example in your research you helped ignite my passion for this field of work. Adri Vermeer, for your reassurance, sharing your expertise and providing hope every time I hit a wall. I am immensely grateful for all the time, support and encouragement you provided throughout my PhD up until the finish line.

... co-authors: Marietjie Vosloo, for your guidance with the paper and your patience teaching me statistics. I learned so much in our monthly meetings at SaIF on structuring and analysing data. Helen Oosthuizen, for your contributions developing the CAP protocol, facilitating the training at Teddy Bear Clinic and writing the paper. It was a pleasure co-facilitating diversion groups with you. Suzan Lemont, for your expertise, infectious enthusiasm for the expressive arts, your contributions to developing the CAP protocol and our brainstorm meetings.

... **Dedel'ingoma:** Adelaide Sheik, Daniel Stompie Selibe, Nicky Vienings, Johanri Engelbrecht and Maria, for introducing me to creative arts therapy in practise. Carletonville Home based care staff, for opening your doors for me and sharing your stories.

... **The Teddy Bear Clinic:** Shaheda Omar, for your trust inviting me into your organization, and your support when introducing a new therapy and collecting data. A sincere thanks to Charles Sathekge, Ndumiso Mdaka, Kavangu Samson Lubisi, Patrick Zulu, Judith Mzaca, Charity Dube, Prudence Mkansi, Kwena Eva Seanego, Ruth Letsoalo, Buyi Makhubela, Faith Nkomo, Dalene Bishop, Natasha Ras, Sheri Erington, Hannelie Venter, Stanley Tshilidzi, Maleshoane Motsiri, and all the others who devoted their time and energy into the CAP programme.

... **Lefika la Phodiso:** Luke Lamprecht and Hayley Bergman, for your interest and brainstorming with me on the CAP therapy and Lefika's contributions to training the social workers at Teddy Bear Clinic.

... **StudyTrust:** Murray Hofmeyr, for seeing the potential and creating a job for me to support my PhD. Studietrust provided me with so much more than a salary; working with you, Tracy September and the mentoring team provided me a platform to develop my research skills, overcoming my fears of public speaking, taught me many life lessons and allowed me to grow my passion for working with students. Sasol Inzalo, Investec, DG Murray Trust and the Narrative Lab, Aiden Choles and Natasha Mee, for your collaboration and help with the student surveys. Ian Clark, for our lovely walks and talks. Your wisdom, leadership and transformative education are a true inspiration and I hope to consult you many more times in future. To all ST students, and Sakhile Njoko and Nyiko Khoza, you have inspired me tremendously with your unstoppable perseverance, resilience and courage.

... **University of Johannesburg:** Tharina Guse, Zelda Knight, Madalein Bezuidenhout, Gert Kruger and other colleagues at UJ, for trusting me to coordinate PSY3GA3 and supervising the Honours research. Although it was short, it was absolutely a very enriching experience and I greatly enjoyed working with you.

... **Utrecht University:** Marieke Sleijpen, Joris Haagen, Trudie Knijn, Rens van de Schoot, Mirjam Moerbeek, and Hennie Boeije, for your advise.

... **International Society for Traumatic Stress Studies:** For awarding me the travel grant to present my research in New Orleans, it was such an honour. Paula Schnurr, for

donating the conference registration fees of your Lifetime Achievement Award to me, and for your research advice.

... students: Marloes, Marloe, Robbe, Bernice, Lieke, Maronja, Puseletso, Bonolo, Liesl and Monique, for helping in my project. It was a privilege and gave me so much joy supervising you with your Honours and Master research.

... participants: A special thanks to the children, parents, social workers, and tertiary students who participated in my study, for your honesty, vulnerability and courage.

... crowdfunding contributors: My sincere appreciation to everyone who donated towards the project and made it possible to buy art supplies and provide arts therapy training to the social workers.

... reading committee: For your time to review my work John de Wit, Claudi Bockting, Maja Dekovic, Jos de Keijser and Pim Scholte.

... Athena Institute (VU University Amsterdam): Jacqueline Broerse and Marjolein Zweekhorst, for your trust and patience hiring me while finishing up my PhD. Elsbet, Linda, Lana and Nienke, for inviting me to the writer's weekend, it was motivating to work together on our projects. Margot, for helping relief some of the pressure finishing my PhD by taking some of the work out of my hands.

... helping hands: For all the other helping hands in my project and all the encouragements and ideas along the way. Arie Lindenburg for reducing my fears around statistics. Jeanette Wolterbeek for your support and collaboration with Mbali's journey of healing. Mark Boyes for sharing the PTSD Checklist. A special thanks to Cathy Malchiodi for your inspiring work.

About the author

Nadine van Westrhenen (1987) obtained her Master's degree in clinical and health psychology from Utrecht University (2010). During her studies, Nadine worked as psychometrist conducting assessments with refugees in the Netherlands, and she served an active role in the Nederlands Instituut voor Psychologen, organizing conferences and chairing the student society in Utrecht. She completed her internship at the medical psychology ward at Rijnstate hospital in Arnhem, the Netherlands, and conducted her research thesis in South Africa, where she developed and evaluated a play therapy intervention programme for severely disabled children. After graduation, Nadine worked as researcher at the University of Johannesburg in a project on the evaluation of creative arts therapy training for hospice staff in Carletonville, South Africa. Subsequently, she worked for four years as research consultant for Studietrust in Johannesburg, focusing on learning of previously disadvantaged students in tertiary education. At the same time, Nadine did research and volunteer work at the Teddy Bear Clinic for Abused children. She provided therapy for abused children, facilitated music therapy groups for young perpetrators of abuse, and she developed and evaluated a creative arts therapy treatment programme for traumatized children that was implemented in four clinics across Johannesburg. In 2015, Nadine was invited as guest speaker at the national conference on child abuse in Pretoria, and later that year she got awarded a travel-grant to present her research on child trauma at the conference of the International Society for Traumatic Stress Studies in New Orleans. Nadine supervised students in their Honours and Master research at Utrecht University and the University of Johannesburg. At the beginning of 2016, she was lecturer and course coordinator for cognitive psychology at the University of Johannesburg. Since August 2016 she works as researcher and lecturer at the Athena Institute at the VU University in Amsterdam, the Netherlands, where she is teaching courses on global and mental health, supervising internships and thesis students, and is involved in several research projects on mental health and improving tertiary education, in the Netherlands as well as in developing countries.



Publications

Flesch, K., van Velzen, M., Mathot, A., Vos, R., & van Westrhenen, N. (2014). A cognitive play intervention in a home for children with developmental disabilities: Protocol of the programme and the monitoring instruments. In A. Vermeer & Z. Magyarszeczy (Eds), *Disability Care in Africa* (pp231-241). VU University Press.

Van Westrhenen, N., & Fritz, E. (2012). The experiences of hospice workers attending creative expressive arts therapy workshops in Gauteng. *Health Education Journal*, *72*(1), 34-46.

Van Westrhenen, N., & Fritz, E. (2014). Creative Arts Therapy as treatment for child trauma: An overview. *The Arts in Psychotherapy*, *41*, 527-534.

Van Westrhenen, N., Fritz, E., Oosthuizen, H., Lemont, S., Vermeer, A., & Kleber, R. (2017). Creative arts in psychotherapy treatment protocol for children after trauma. *The Arts in Psychotherapy*, *54*, 128-135.

Van Westrhenen, N., Fritz, E., Vermeer, A., & Kleber, R. (2017). Reflections of social workers on working with abused children in South Africa. *Child Abuse Research in South Africa*, *18*(1), 1-10.

Vosloo, M., Hofmeyr, M., & Van Westrhenen, N. (2013). *Growing Engineers: the experiences and reflections of a busary provider*. Proceedings of the 2nd Biennial Conference of the South African Society for Engineering, Stellenbosch: SASEE.