

# CHAPTER 1

## INTRODUCTION TO THE RESEARCH STUDY

### 1.1 INTRODUCTION

Trauma is a vivid reality in South Africa and can take on diverse forms, including natural disasters (e.g. the recent floods in Kwazulu-Natal), terrifying accidents, being diagnosed with a life threatening illness (e.g. HIV and AIDS), violent crime (e.g. the xenophobic attacks in Gauteng) and child maltreatment.

It is thus inevitable that many children in South Africa are exposed to different traumatic situations, the impact of which should not be underestimated (Lewis, 1999). South Africa has a wide spectrum of childhood trauma. Shields, Nadasen and Pierce (2008) point out that the end of apartheid led citizens of the rainbow nation to believe that they were free of violence. Instead, different forms of interpersonal violent crimes replaced political violence. Crime is currently pervading our daily lives like a plague. It affects the way we think, act and respond to one another. Fischer (2002) adds to this by describing that South Africa is a violent country with murders, rape, armed robberies, and muggings occurring at an alarming rate. Community violence may result in the development of trauma-related symptoms (Shields, Nadasen, & Pierce, 2008). The xenophobic attacks in townships in Gauteng can be described as traumatising for both foreign and South African children. In his keynote address at the South African Trauma Congress on Contemporary Psychotherapeutic Approaches, Hartman (2008a) rightly stated the following:

“The country is currently awash in a tidal wave of Aids and crime, a plague of violence and brutality of such perceived magnitude and immediacy as to have become virtually infused into the daily lives, habits, and consciousness of all its citizens. In fact, South Africans often continue to live fragmented and therefore traumatized lives. They are usually preoccupied with the horrors of the past, such as Apartheid and Racism, or they are preoccupied with anxieties of the future, such as xenophobia, crime, HIV Aids and economic survival.”

Child maltreatment is a global phenomena and no society is immune. There are however certain conditions present in South Africa that lead to the occurrence of child abuse and neglect, namely poverty, patriarchy, socialized obedience, dependency, and because of the fact that women and children are forced to silence (Richter & Dawes, 2008). HIV and AIDS is a pandemic in South Africa, and cause different psychosocial problems for both the infected patients as well as their

significant others. Cluver and Gardner (2006, p. 9) investigated the psychological well-being of AIDS orphans in Cape Town. According to their findings, 73% of their sample scored above the cut-off for Posttraumatic Stress Disorder (PTSD). The spectrum of childhood trauma in South Africa will be discussed in more detail in chapter 2.

Flisher, Patel, Nikapota and Malhotra (2008) stress that the promotion of child and adolescent mental health in middle income countries like South Africa is very important. However, psychotherapy is an unaffordable luxury for the majority of South Africans and the Department of Social Development lacks the human resources to provide free counselling to child trauma victims. Lockhat and Van Niekerk (2000, p. 300) makes the statement that "there is an acute shortage of adequately trained health care and social workers to cater to the needs of the thousands of children affected by violence".

New methods of therapy are thus required that are simple to implement, effective and affordable. This would reduce the number of children growing up with trauma symptoms, helping to reduce the extent of social problems these children may encounter later in life. It is the candidate's contention that Eye Movement Integration (EMI) may be just that method of therapy. EMI is a new form of therapy in the field of social work in South Africa, but is currently winning ground as a therapeutic intervention worldwide. The Milton H Erickson Institute of South Africa (MEISA) has been training social workers and other professionals in EMI since 2006 (Hartman, 2006). In the candidate's experience, EMI can make a significant difference in treating victims of trauma more effectively and efficiently. This brought the candidate to the question of the utility of EMI as an intervention strategy for child trauma victims.

## **1.2 DEVELOPING SIGNIFICANCE OF THE STUDY**

### **1.2.1 GENERAL SIGNIFICANCE**

EMI has enjoyed wide application in clinical practice, however, little research has been done regarding this therapy, particularly concerning children. Danie Beaulieu (2004) undertook a research study to investigate the effectiveness of EMI with adult survivors of trauma. Qualified social workers and psychologists participated in the study and received specialised training in EMI. According to the results, there was definite improvement of the respondents' posttraumatic and dissociative symptoms. The candidate however agrees with Graeff-Martin et al. (2008) who state that children and adolescents have different demands and do not respond to intervention the same way as adults. It is thus important to assess the usefulness of EMI with the childhood population as a possible intervention for trauma.

EMI is a brief therapeutic intervention. Clients can experience relief from their trauma symptoms in as little as one session (Beaulieu, 2004). This makes it a cost effective intervention. It is important to note that mental health problems in children generate costs for parents, different government

institutions, as well as for non-governmental organisations (Graeff-Martin et al., 2008). It is therefore important to search for interventions and practices that give optimal results at the lowest cost.

Trauma has a ripple effect, spreading the damage done to victims as well as significant others in their lives. Dekel and Solomon (2006, p. 27) define secondary trauma as follows: "Secondary traumatisation refers to the traumatisation of persons in close proximity to victims of traumatic events, who suffer from a range of emotional symptoms although they themselves were not directly exposed". According to Ruback and Thompson (2001), indirect victimisation has the same potential to lead to chronic Posttraumatic Stress Disorder (PTSD) symptoms as a direct experience of victimisation. It is therefore essential to address trauma systemically, in order to promote healthy functioning. EMI addresses the symptoms of the victim in a shorter timeframe than conventional clinical approaches to trauma, and therefore helps the significant others of the trauma victim. The people close to the victim do not feel as helpless, therefore mental health for the whole system is promoted.

In view of the above, this study may lead to the utilisation of a technique that can be beneficial to social workers working with children in different sectors, leading to cost-effective, brief services. It can also lead to the immediate reduction of the ripple effect of trauma. Consequently, problems due to trauma that might surface at a later stage will be reduced and caseloads of overworked social workers will also be minimised. Finally, as EMI is a new technique, this research provides a base-line study that can stimulate further research in this interesting technique of trauma intervention.

## **1.2.2 SIGNIFICANCE OF EMI FOR SOCIAL WORK**

Prior to 1994, the approach to social work in South Africa was based on that of Western countries. The focus was on rendering services to individuals in need and the educational material was based on foreign trends. The definition of social work in the Social Service Professions Act No. 110 of 1978 indeed encompassed this idea by stating "Social Work means any act, activity or method directed at diagnosing, eliminating, preventing or treating social malfunctioning or problematic functioning in man, or treating social malfunctioning or problematic functioning in man, or at promoting social stability in man, and includes any process which is calculated to promote the efficient performance or application of such act, activity or method" (Republic of South Africa, 1978, Definitions). Drower (2002) points out that the main critique against this definition is that it does not promote a holistic approach to the person in environment. This Act is however currently under revision and a new bill has been proposed (South African Council for Social Service Profession, 2008).

With the political changes after apartheid, it soon became evident that this individualistic approach to social work did not fit the unique social needs of the South African society. Social work went through a much-needed transformation since 1994, concerning the view of the profession's

function. It is now focusing more on social development and empowerment, and moving away from the casework paradigm (Drower, 2002; Gray & Lombard, 2008; Gray & Mazibuko, 2002; Hölsher, 2008; Lombard, 2008). Potgieter (1998) identifies six issues that confront the South African social work profession, namely poverty, unemployment, malnutrition, housing and public health, literacy and education, and violence, abuse and neglect. In South Africa 10 000 social workers are employed to serve a country with a population of approximately 47 million people, of which about 40% live in poverty (Hölsher, 2008, p. 116). It is thus evident that a shift had to take place focussing more on community-based interventions.

Clinical practice came under the spotlight during the much-needed transformation period in social work. Lombard (2008) however points out that because of the high incidence of trauma in the country, clinical practice still forms an integral part of social work services. Gray and Mazibuko (2008) emphasize that social casework must be integrated with other interventions, which form part of social development. These authors believe that the problem does not lie with the utilisation of casework in the developmental social welfare paradigm, but rather with the fact that for a long time, other methods of intervention were excluded. Sturgeon (1998) proposes that social development must address the problems of a community on different levels and that casework therefore plays an integrative role. The skill lies in the ability of social workers to find a balance within their field of practice between community development and clinical practice. Lombard (2005) conducted a study in regards to NGO's in South Africa. According to the results, social workers were indeed able to balance their traditional counselling roles successfully with their community and prevention roles. It is therefore important to acquire new skills in all the fields of practice in order to maintain that balance. Social workers and social work students must receive quality education in clinical practice as well as the field of social development in order to render effective social services. Sturgeon (1998) proposes that short-term, focused, goal orientated and cost-effective individual intervention models are appropriate approaches in developmental social work. EMI is indeed a brief trauma intervention strategy that is goal orientated and focused.

This briefness of EMI is another advantage for social work. This trauma intervention strategy could relieve the workload of social workers working with children in a variety of settings. Lombard (2008) points out that the neglect of social services has a longstanding impact on the service delivery, such as the inadequate numbers of practitioners and the deepening of the poverty crisis, as well as inadequate prevention and early intervention programs. The profession also faces challenges because of the brain drain to foreign countries. Dr Zola Skweyiya, the current Minister of Social Development acknowledged in his address at the International Schools of Social Work Congress, on 21 July 2008, that social work is currently a scarce skill. The Department of Social Development drafted a recruitment and retention strategy to address this problem. In the meantime, there is still a vast amount of problems for an insufficient number of social workers. The government's caseloads norm is 1:60 (Lombard, 2008). Child Welfare South Africa (n.d.) however conducted a research study in 2003/2004 to determine the working conditions of social workers employed by different child welfare societies. These 169 societies are all registered members of Child Welfare South Africa (CWSA), and employ around 696 social workers. According

to their results, 63% of the respondents carried caseloads of more than 60, and a further 36% carried caseloads of more than a 100 cases.

Sturgeon (1998) notes that a large part of effective implementation of social development is to relieve the other demands on social workers. This can entail that some of the services are contracted out to private practitioners or organisations, for instance individual therapy. Social workers are a more cost-effective option than other health professionals (Cohen, 2003), and therefore sufficient training and techniques must be offered to these social workers so that their services will remain effective and in line with contemporary approaches.

Social workers render services in different settings. These settings might be in government, non-governmental organisations (NGO's), different types of private institutions, as part of a multi-disciplinary team, or in private practice. The need for diversity in social service delivery became evident by a recent research study commissioned by the South African Council for Social Service Professions (SACSSP), which investigated the demarcation of social services (July, 2008). According to the report of this study, twelve specialisations in social work are recommended, including clinical social work and mental health services. The New Dictionary of Social Work (Terminology Committee, 1995, p. 10) defines clinical social work as the "process for treatment which is aimed at assisting individuals, families and groups in dealing with problems with social functioning by supporting, developing and promoting their internal resources." Practicing in the clinical field entails that the social worker must be equipped and trained in various models, techniques and interventions to be able to render effective services for people or families with different needs (Maguire, 2002).

A last important point in regard to the benefit of this study links with an important observation made by Thyer (2007). The author notes that there is currently a growth in literature of psychotherapy, but that social workers are largely absent from research concerning therapy outcomes research. There are however, a large number of social workers conducting therapy, and social work could therefore definitely make a positive contribution towards evidence-based practice.

In conclusion, it can be said that while clinical practice is not the main focus of social work in South Africa, our practice context requires social workers to have solid clinical competencies to address the wide range of clinical needs at community level. Therefore social workers need to continue training in this regard, in order to render efficient and contemporary services to their specific clients.

### **1.3 PROBLEM FORMULATION**

May (2002) mentions that formulating a research question is probably the most challenging task

that researchers face. The research question of this particular study can be formulated as follows:

*Is EMI a workable therapeutic strategy in social work for children with childhood trauma?*

## **1.4 THE GOAL AND OBJECTIVES OF THE STUDY**

De Vos (2006, p. 104) refers to the goal of a study as the “dream” and the objectives as the “steps” to be taken to achieve the dream. Struwig and Stead (2001, p. 35) alternatively refer to the goal of the research as the “primary objective”, and the objectives as the “secondary objectives”. These terms can thus be described as the goal being the result, which would be achieved by applying the objectives. The goal of this study was to explore the utilisation of EMI as a social work intervention for treating psychosocial trauma with children aged 14 to 16 years.

The candidate applied the following objectives in order to achieve this goal:

- Conducted an extensive literature study on EMI as an intervention strategy, trauma and its impact on memory, as well as neuro-linguistic programming and trauma.
- Assessed a single session of EMI with twelve clients aged 14 to 16 years through a pre and post intervention administration of the Trauma Symptom Checklist for Children (TSCC) and a follow-up interview with the parent or caregiver of the children.
- Kept a journal of the EMI process, in order to log challenges and observations in this regard.
- Analysed the data that were collected.
- Made appropriate recommendations regarding the implementation of EMI with children as an intervention for emotional trauma.

## **1.5 THE RESEARCH PLAN**

### **1.5.1 RESEARCH DESIGN**

Research design can be seen as the plan of researchers whereby the objectives that they formulated, are carried out (De Vos, 2006; Babbie, 2005 & Walsh, 2001). Punch (2005) explains the term ‘design’ on a concrete level by stating that the research design connects the research question with the data.

This was an exploratory study because the subject has not previously been researched (Terre Blanche & Durrheim, 2006). Although Steve and Connirae Andreas, and Beaulieu have clearly defined EMI as a method of intervention, the utility of this intervention with children has not yet been researched. Consequently, the study did not purport to be a clinical evaluation of EMI with children, but rather an exploratory assessment of the utility of EMI as an intervention strategy with children. The candidate was thus less interested in evaluating whether EMI is effective at reducing

trauma symptoms, and more interested in assessing the challenges and benefits in utilising EMI with children.

A multi-method design was used, consisting of a combination of qualitative and quantitative methods of research. Literature refers to this approach as triangulation (Barbour, 2008; Brewer & Hunter, 2006, De Vos, 2006; Knight, 2002; Neuman, 2000; Terre Blanche & Durrheim, 2006). Triangulation gives researchers a clearer view on all the aspects of the phenomenon that is investigated. The candidate specifically made use of concurrent triangulation, as both the qualitative and quantitative methods were used simultaneously during the data collection process (Tashakkori & Teddlie, 2003).

Brewer and Hunter (2006, p. 4) make the following statement concerning the essence of a multi-method approach: "Its fundamental strategy is to attack a research problem with an arsenal of methods that have no overlapping weaknesses in addition to their complementary strengths." The adoption of a combination of qualitative and quantitative methods provided a comprehensive assessment of the utility of EMI with children.

### **1.5.2 POPULATION AND SAMPLE**

The population for this study was defined as children in the age range of 14 to 16 years, living in Gauteng, who had experienced trauma and who presented with current symptoms of trauma that had been present for at least four weeks prior to the baseline data collection.

Brewer and Hunter (2006) explain that with quota sampling, the candidate specifically tries to select a sample that represents important characteristics of the population. The main characteristics that were relevant to this research study are gender and population group. Using quota sampling, the candidate conveniently selected the participants from her private practice and from the Abraham Kriel Care Centre, Langlaagte. A two-by-two sample frame was used to select 12 children: three African males, three White males, three African females and three White females. The sample size is sufficient for the exploratory nature of this study and the sample frame ensured the diversity of the sample.

### **1.5.3 DATA COLLECTION**

The candidate utilised the one-group pretest-posttest design for conducting the study. This design is basic as it has only one group (an experimental group), with single measurements before and after the intervention (Bless & Achola, 2000; Neuman, 2000). The intervention comprised one session of EMI, which was sufficient to produce a measurable change in trauma symptoms. The prescribed structure EMI was followed and the length of the sessions was between sixty and ninety minutes.

The quantitative component of the study took the form of the Trauma Symptom Checklist for Children (TSCC) administered immediately before and two weeks after the EMI session. John Briere developed the TSCC in 1996. This self-report questionnaire consists of 54 items, which assess a variety of symptoms related to traumatic events in 8-16 year old children (Sadowski & Friedrich, 2000). The subscales are both trauma specific (e.g. sexual concerns, posttraumatic stress and dissociation) and generic (e.g. anger, anxiety and depression). The full test takes approximately 15-20 minutes to administer. The TSCC has demonstrated good reliability and validity in studies in foreign countries (Briere, 1996; Nilsson, Wadsby & Svedin, 2008), though has not been validated in South Africa.

The qualitative component of the study had two parts. Firstly, the candidate kept a journal of the EMI sessions, highlighting details of any difficulties or challenges experienced in the utilisation of the technique with the children. Corti (1993) mentions that journal entries give a rich supplement to data gathered from interviews, which links with the second qualitative component, namely semi-structured interviews.

The candidate also conducted semi-structured interviews with the children's parent or caregiver two weeks after conducting the EMI session. The candidate designed the interview schedule to target the key trauma symptoms that EMI aims to ameliorate and to be consonant with the TSCC. This type of interview gives the researcher and the respondent some flexibility, as the participants get the opportunity to elaborate beyond the questions' confines (De Vos, 2006).

#### **1.5.4 DATA INTERPRETATION**

The candidate conducted a parallel mixed analysis. Onwuegbuzie and Leech (2004, p. 779) state that in order to conduct parallel mixed analysis the following conditions should be present: (a) The analysis of both sets of data occur independently, (b) The different sets of analysis do not need to follow on each other in the analysis phase, and (c) the results from each set of analysis are only compared or combined after the finalisation of the separate analysis processes.

The quantitative data was captured into SPSS and analysed using nonparametric statistics, because of the small sample size. Specifically, the Wilcoxon Signed-Rank Test was used to compare the pairs of pre-test and post-test scores. Significance will be set at  $p < .05$ . The two sets of qualitative data were analysed using content analysis. The congruence of the qualitative and quantitative data results was then assessed.

### **1.6 CENTRAL CONCEPTS**

The following concepts will be briefly discussed, but will be elaborated in Chapters two and three of the research report:

(i) Children

According to the Oxford Dictionary of Law (Law & Martin, 2006), there is no definite definition of a child, although it may be described as a young human being. According to The Children's Act of South Africa, Act 35 of 2005 (Republic of South Africa, 2005, Chapter 1), a child can be defined as a person under the age of 18 years.

(ii) Trauma

Scaer (2005 p. 205) defines trauma as follows: "Trauma is an experience that involves a threat to life while the victim is in a state of relative helplessness". Beaulieu (2004, p. 28) expands by saying "trauma is any experience that leaves an imprint that continues to give rise to negative effects and recurrences in one or more of the sensory, emotional or cognitive systems".

A nonprofessional would thus generally envision a traumatic experience as an extraordinary event that does not enclose the range of normal, everyday human experience. Emmerson (2004) states that in order to understand the difference between a mere negative event and a traumatic experience, it is important to note that a traumatic event can result in a lasting trauma, that influences and interferes with a person's daily functioning. Beaulieu (2004) states simply that an event was traumatic for a person if the individual (or the significant others for that matter) feels that it was traumatic. She further states, "It is the ongoing, deleterious effects of an occurrence that identify it as a trauma, rather than the nature of the event itself" (p. 28). Van der Hart, Nijenhuis and Steele (2005) corroborate with this statement by saying that they regard trauma as a subjective response of an individual towards an event, and not the quality or intensity of the event.

In conclusion it can be said that trauma is an individual's (or her/his significant others') reaction to, or experience of an event that she/he perceived so threatening and traumatic that it may change his/her original personal or emotional functioning. Thus, one person may experience a smash-and-grab incident as a minor inconvenience, while for another it may be an overwhelming shock.

(iii) Symptoms of Childhood Trauma

There are different reactions to trauma and possible trauma related symptoms. Trauma can have a devastating effect on children, regardless if it is short-term or long-term trauma. Their reactions may vary considerably from each other. Wicks-Nelson and Israel (2006) mention that children may develop increased fears directly associated with the trauma. They may also experience separation difficulties and sleep disturbances. Adolescents may lose hope for the future. Van der Kolk (2003) adds that children that experienced trauma may lose the ability to regulate themselves, have difficulty in school, be more prone to physical illness and have social problems.

The trauma-related symptoms that are going to be discussed in this dissertation are (1) anxiety; (2) depression; (3) anger; (4) posttraumatic stress (PST); (5) dissociation and (6) sexual concerns. These are the key symptoms that are also measured in the Trauma Symptom Checklist for Children.

(iv) Eye Movement Integration Therapy

Steve and Connirae Andreas researched the possible links between eye movements and its therapeutic potential, and they were intrigued about the possibility that eye movements can influence thought, as it seemed that thought influenced eye movements. Subsequently EMI was developed. Beaulieu studied under the Andreas-brothers, with their consent started to develop their technique further, and wrote the only book on this topic.

Beaulieu (2004) notes that the memories that a person establishes by means of the amygdala (without going through the hippocampus first), are usually fragmented, as there is no narrative. These memories are saved within the modalities (senses). In order to recover from trauma, the memories from the hippocampus must be integrated with the memories of the amygdala. This is a normal process of the brain in order to integrate memories. It appears that EMI is able to do this integration process via its 22 eye movements. Beaulieu (2005) is of the opinion that EMI allows the person to access multi-sensory contact with both trauma and positive memory traces. EMI is an intervention strategy used for chronic trauma symptoms.

## **1.7 ETHICAL CONSIDERATIONS**

McCleod (2003) emphasizes that the researcher must consider the various ethical issues, especially those unique to the counselling process. The candidate will address ethical concerns throughout the study. The following procedures were put in place to ensure that the study was conducted in an ethical manner:

- The candidate obtained informed consent from the parents or guardians of the children. The headmaster of the Abraham Kriel Care centre (Langlaagte) is by law (Republic of South Africa, 2005) the legal guardian of those particular participants. Greig and Taylor (1999) clarify that informed consent implies that the candidate ensures that the participants and their parents know that they have a choice to participate in the study or not and that they know that they can withdraw from the research any time if they wish to do so. Fraser, Lewis, Ding, Kellett and Robinson (2005) state that the consent form must be clear and understandable, and must be written in the preferred language of the parent/guardian. The parent/guardian received a copy of the consent form. The consent forms were compiled by the candidate and were available in both Afrikaans and English (Annexure A).

- Greene and Hogan (2005) emphasize that children and adults have equal rights to be informed about the nature of the research, as well as give their consent whether they want to take part or not. Fraser et al. (2005) agree and predict that children are more likely to participate and be positive about the research process if their rights are acknowledged. The candidate compiled a consent form that was signed by the children (Annexure B). The candidate also verbally explained the content of the form, to ensure their understanding.
- Both consent forms informed the participants and their parents/guardians that they had a choice regarding their participation in the study and that they could withdraw from the research any time if they wished to do so. They were informed of the nature and purpose of the study, as well as possible risks involved in participating. The importance of the privacy and confidentiality of the participants were also addressed in the content of the forms.
- The candidate set mechanisms in place for the immediate referral of participants to a mental health professional for additional therapy should they have appeared adversely affected by their participation in the study.
- The candidate worked in close proximity with a specialist in the field of trauma and clinical practice, who is an expert in conducting EMI. She was in personal contact with Dr Danie Beaulieu during the study, to ensure that the EMI was implemented in the correct and appropriate manner.
- Farrell (2005) stipulates that confidentiality is the trademark of ethical research, and therefore the candidate contracted with the children and their parents that the information obtained will remain strictly confidential and anonymous.
- The candidate conducted a brief feedback session with all the children and their parents/caregivers, to share the results of the study with all related parties.
- This study was reviewed by die Ethics Committee of the University of Johannesburg, and was approved on 2008/08/06, as indicated by Professor Smit (chairperson of the committee).

## 1.8 CHAPTER SEQUENCES

This study will consist of six chapters. *Chapter 1* serves as a general orientation to and an outline of the study. In *Chapter 2*, an in-depth literature study concerning childhood trauma will be presented, while the origin and literature of EMI will be discussed in *Chapter 3*. *Chapter 4* will deal with the research methodology in more detail. The purpose of *Chapter 5* is to discuss the findings of the study. Finally, *Chapter 6* will contain the conclusions and recommendation.

# CHAPTER 2

## CHILDHOOD TRAUMA

### 2.1 INTRODUCTION

Wester and Sugarman (2007) point out that what a child perceives as traumatic may be small or insignificant through an adult's eyes. Children may for example find 'the monster under the bed' a real threat and even be traumatised by it. Early descriptions of children's exposure to traumatic situations, suggested that their reactions to trauma would be mild and temporary (Wicks-Nelson & Israel, 2006). Different types of trauma have been studied independently, which possibly led to a fragmented understanding of this complex phenomenon. Contemporary research conducted over the world the past two decades however has shown that childhood trauma may lead to various psychopathologies and can even become a developmental disorder (Weber & Reynolds, 2004). Recent trends in research on childhood trauma aim to integrate the information of the various forms of trauma. This can possibly lead to a more comprehensive approach to assessment and subsequent intervention strategies (Van der Kolk, McFarlane, & Weisaeth, 2007).

This chapter will focus on defining trauma, as well as the neurobiological effect of trauma, as this is an important factor in understanding the reason why EMI can be promoted as an effective intervention strategy. An overview of the trauma spectrum of children in South Africa will also be discussed. Attention will be given to the developmental issues concerning childhood trauma and finally the symptoms of childhood trauma will be discussed.

### 2.2 DEFINING TRAUMA

There are different viewpoints and debates regarding the definition of trauma. The official way for health care professionals to recognise an event as traumatic is to define it according to the DSM IV-TR (American Psychiatric Association, 2000, p. 463), which states the following: "The person has been exposed to a traumatic event in which both of the following conditions were present: (1) The person experienced, witnessed or was confronted with an event that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others. (2) The person's response involved intense fear, helplessness, or horror". Ozer and Weiss (2004) however critique this definition by asking, if two persons have had the same experience, and only one reacts with horror, helplessness and fear, did only one of them have a traumatic experience?

Literature has suggested that the definition of trauma should be expanded to encompass second hand exposure as well as direct experience (McNally, 2007). Southwick and Charney (2004) oppose this suggestion by stating that such an extension may dilute the diagnosis of trauma-

related symptoms. The candidate agrees with Levine (1997) who states that people in the helping professions tend to define trauma just in terms of the event that caused it, instead of defining it on its own terms and considering the individual. When looking specifically at childhood trauma, Terr (2003, p. 322) gives a sound definition by stating, "I will define childhood trauma as the mental result of one sudden, external blow or a series of blows, rendering the young person temporarily helpless and breaking past ordinary coping and defensive operations".

In conclusion, it can thus be said that childhood trauma is either a child's reaction to, or experience of an event that he or she perceives as so threatening and traumatic that it can alter his/her original, pre-traumatic physical and/or psychosocial functioning. Therefore, an event can only be defined as traumatic when the effect thereof has been assessed after it has taken place. An example would be the initiation rituals of young people in some South African cultures. Some of the children may experience this process as intrusive and traumatising, whereas others may have a feeling of belonging and pride. Therefore the event in itself cannot be defined as traumatic, but the individual can perceive it in such a way. The candidate feels that one cannot isolate either the incident or the symptoms in defining trauma, but should rather consider different aspects in conjunction, such as the event itself, trauma-related symptoms, culture, resilience, and social support.

For the purpose of this study it is not important only to understand how trauma can be defined, but also to have an overview of the neurobiological effect of trauma, as EMI is a neurotherapy that focuses on the integration of trauma memories.

### **2.3. NEUROBIOLOGICAL MECHANISMS OF SURVIVAL FROM CHILDHOOD TRAUMA**

For the past two decades there has been a dramatic increase in neurobiological research, which is related to different important and relevant areas of clinical social work. In their article, Shapiro and Applegate (2000) discuss how the contemporary knowledge of neurobiology helps social workers from a biopsychosocial perspective to render services to families in the communities that are at risk. Baylis (2006) on the other hand describes how knowledge from neuroscience helps social workers to utilise the therapeutic relationship in order to advance clinical outcomes of intervention. The information on the neurobiological effect of trauma is more technical of nature, as this is a specialised medical field. New and contemporary research on this topic however, also bears on social workers working in the field of trauma.

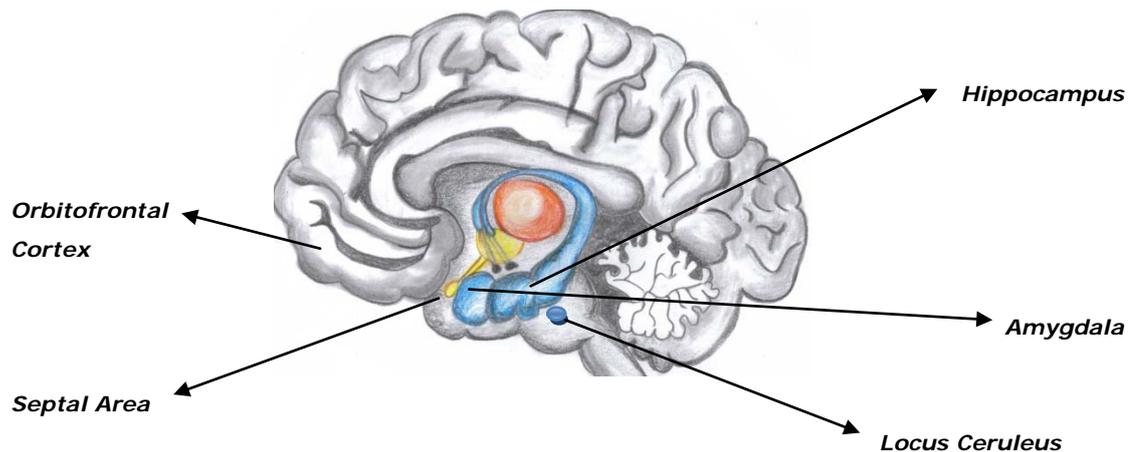
There are several biological systems and neuro-transmitters involved when a child is confronted with a threatening situation (Briere & Scott, 2006). However, addressing all the systems involved is beyond the scope of this report. Therefore, only the central systems will be explained.

### 2.3.1 AN OVERVIEW OF RELATED BRAIN STRUCTURES

The brain consists of two cerebral hemispheres that are divided into three major regions, namely the forebrain, midbrain, and hindbrain. It is however the frontal and central parts of the right hemisphere that are responsible for the response to a threatening/ stressful situation (Scaer, 2005). The forebrain has four major structures, namely the cerebral cortex, limbic system, thalamus and hypothalamus. Anatomists differ on the proposed structures that they include in the limbic system. The most common structures proposed are the amygdala, hippocampus and the septal area. These structures innervate each other to form a network that contributes to our emotion, learning and formation of memories (Breedlove, Rosenzweig, & Watson, 2007; Freberg, 2006). The cortex does not form part of the limbic system, but also plays an important role in the processing of information. The locus ceruleus is situated in the pons, which is located in the brainstem.

Figure 2.1 illustrates the specific structures of the brain which play an important role in distressing situations. They are the amygdala, hippocampus, cortex and locus ceruleus. It is important to understand the normal function of each of these structures in order to understand their function during a threatening situation.

The *amygdala* is so named due to its almond shape and is the part of the limbic system that provides emotional importance to the stimuli related to affective states (Weber & Reynolds, 2004). The amygdala starts functioning about right after birth. The *hippocampus* is named after the Greek word for "seahorse" and plays a crucial role in memory function and learning behaviour (Weber & Reynolds, 2004). The hippocampus starts functioning at around the age of two years and gradually matures until about the age of five. It seems as if the *septal area* has a strong involvement in emotional behaviour, like rage and anger. The *cortex* forms the outer grey covering of the cerebral hemispheres and is the brain's centre of higher and integrative functioning. The major sections that divide the cortex are the four lobes of the brain, namely the parietal, temporal, lateral and occipital lobes (Freberg, 2006). These different areas each encompass several different functions. The orbitofrontal cortex is situated right behind the eyes and is the central regulator of both conscious and unconscious survival behaviour of a human being. The *locus ceruleus* is also known as the blue centre, due to its composition of blue-staining cells (Scaer, 2005). It is a small noradrenergic structure in the brainstem that participates in arousal and produces the neurotransmitter norepinephrine, also known as adrenaline (Breedlove et al., 2007; Freburg, 2006).



**Figure 2.1: Important brain structures of the frontal and central areas of the right cerebral hemisphere**

### 2.3.2 THE BRAIN AND TRAUMA REACTIONS

Like animals, humans react with a “fight, flight and freeze” response when we feel threatened. This is called the animal model of inescapable shock. Van der Kolk (1988), among others, makes use of this model to explain the biological adaptation of people to life threatening situations. He mentions that the animal model of inescapable shock (IS) gives the opportunity to understand the physiological response in PTSD of a human being. This “fight, flight or freeze” response is invoked by the amygdala (Levine, 1997; Rothschild, 2000; Scaer, 2005; Van der Kolk, 1988).

Trauma follows a specific pathway in the brain. The relevant structures as well as certain endocrine systems play a role in eliciting a response from the person. Figure 2.2 demonstrates the brain pathways that trauma follows. Scaer (2005) describes this pathways of trauma in the brain in an uncomplicated model. First, the information is received through the primary senses and the body. This information is then send to the locus ceruleus that evaluate the information for threat content. In return, the information is sent to the amygdala were the information is again evaluated for emotional content. The amygdala then sends the information to the hippocampus, which assigns cognitive meaning to the information and in return sends the messages to the orbitofrontal cortex. The orbitofrontal cortex then activates the hypothalamic/pituitary/adrenal (HPA) axis, which is the body’s endocrine (hormonal) response. Important hormones are then secreted which are essential in stress response, such cortisol and adrenaline. The information is also send to the cerebral cortex, which organises the survival behaviour.

Scaer (2005) mentions that an animal’s first reaction would be to fight or to flight, but when this action is unsuccessful or impossible, it would unconsciously turn to the freeze option. The animal will resume and complete its last movement prior to the stress response. Scaer (2005 p. 45) refers to this action as the “freeze discharge” and states that this action is important for the animal to return to its pre-trauma biological condition. Levine (1996) affirms that people develop trauma-

related symptoms because of the fact that this freeze discharge did not take place and therefore the energy of the threat is still captured in the body. In conclusion, it is the incapability of the person to return to a state of equilibrium and not the event in itself that causes trauma-related symptoms.

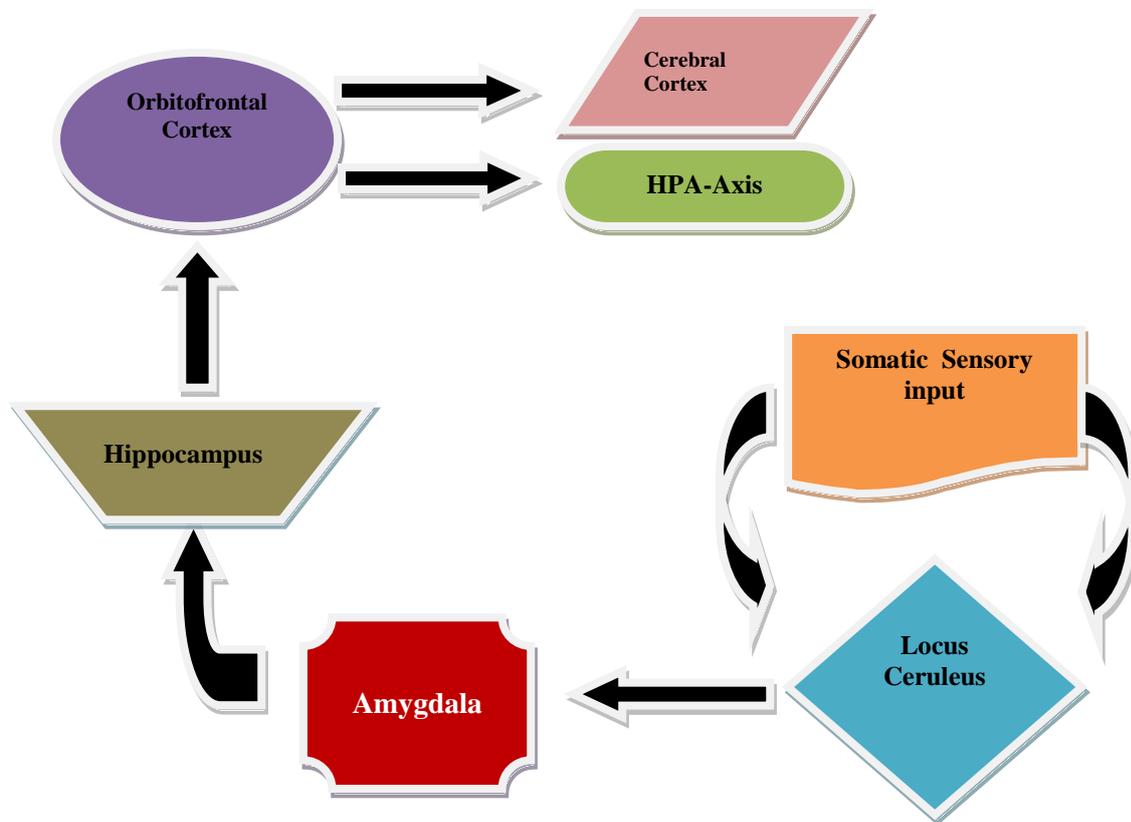


Figure 2.2: The brain pathways for trauma (Scaer, 2005, p. 51)

### 2.3.3 MEMORY AND TRAUMA

In order to understand the complex concept of trauma memory, it is important to understand what memory is. Memory can be described as the biological ability of a human being to record and store our internal and external experiences and responses in the brain, so that they can be retrieved in order to effectively evaluate and appropriately respond to future stimuli (Inbinder, 2002; Rothschild, 2000). Around 40 years ago, memory was described as a unitary concept (Rothschild, 2000). There was no differentiation made in levels or types of memory. During the 1960's, however two new categories of memory were suggested, namely long-term and short-term memory. Both these terms are just as their names imply. Short-term memory usually consists of information that has been 'crammed' into the brain, but is not remembered long term. With long-term memory however information is stored permanently, regardless of whether it will be recalled into the conscious mind.

Rothschild (2000) points out that it was only during the late 1980's, early 1990's that the concept of multiple memory systems was accepted. Two of these categories are explicit/declarative memory and implicit/nondeclarative memory. The difference between these two categories is described extensively in literature (Diseth, 2005; Inbinder, 2002; Kaplow, Saxe, Putnam, Pynoos & Lieberman, 2006; LeDoux, 1996; Rothschild, 2000; Scaer, 2005; Van der Kolk, 2002; Van der Kolk, McFarlane & Weisaeth, 2007).

Explicit/declarative memory is the memory of facts, ideas, concepts, and events that we are consciously aware of and that are closely linked to the language system. The hippocampus is responsible for the processing of the explicit memory and therefore it only develops around the age of two to three years (Scaer, 2005). This is the reason why we cannot consciously recall events that happened to us prior to that age. If a person gives an account of the explicit memory of a traumatic event, he/she will be able to put the experience in words.

The amygdala is responsible for the storage of implicit/nondeclarative memory, which is unconscious and present from birth. Implicit memory bypasses language and has no narrative. It can therefore be described as "speechless". Rothschild (2000) uses the example of riding a bicycle to describe how implicit memory works. He postulates that if a person once learned how to ride a bicycle, he/she can repeat it afterwards without consciously thinking about it. Scaer (2005) agrees but suggests that this example above would rather be named procedural memory, which forms part of implicit memory. According to the author, procedural memory contains information on motor skills and sensorimotor responses.

Kaplow et al. (2006) point out that these memory systems are usually accurately coordinated. The hippocampus is vulnerable to stress however (Teicher et al., 2003) and if the amygdala is over stimulated, like in the event of extreme stress, the function of the hippocampus is sometimes suppressed. The implicit and explicit memories then become disengaged, which leads to the dissociation of the sensory and affective elements from any coherent narrative memories. The result is that this traumatic memory can be fragmented, out of sequence and full of gaps. Beaulieu (2004) declares that these traumatic memories are saved within the modalities (senses), and in order to recover from trauma, the explicit memories from the hippocampus must be integrated with the implicit memories of the amygdala. Even if these memories are fragmented in this way, they continue to exist and to influence the person's emotional and behavioural systems. The integration of these explicit and implicit memories is, therefore, an important therapeutic objective.

This section has highlighted the important effects that trauma has on the neurobiological system of a person, which is vital information in order to understand the reason why EMI can be promoted as an effective intervention in treating trauma. EMI as a trauma therapy can however only be effective if trauma related symptoms have been assessed and identified. During the following section different trauma symptoms will be discussed.

## **2.4 SYMPTOMS OF CHILDHOOD TRAUMA**

Trauma has far-reaching effects on different aspects of children's lives and their overall emotional, cognitive and behavioural functioning. Nemehoff (2004) mentions that recent studies suggest that there is definite correlation between childhood adversities and adult psychiatric disorders. Significant evidence in literature supports the fact that trauma has a detrimental effect on the developing brain. Complex trauma is a term that has been adopted by the mental health profession to describe the experience of severe, recurring stressors in the early developmental stage of a child's life, usually interpersonal by nature, for example child maltreatment (Kinniburgh, Blaustein & Spinazzola, 2005; Van der Kolk, 2005).

Streeck-Fischer and Van der Kolk (2000, p. 903) describe the effect of complex trauma as follows; "chronic childhood trauma interferes with a child's capacity to integrate sensory, emotional and cognitive information into a cohesive whole and sets the stage for unfocused and irrelevant responses to subsequent stress". The importance of identification of various trauma reactions and symptoms by the social worker should not be underestimated. Briere, Kaltman and Green (2008) conducted a study with 2453 female university students, and according to their findings there is a direct relationship between the experience of multiple types of trauma before the age of 18, and the complexity of trauma symptoms.

The social worker must be aware that not all children react in a similar way to trauma, or develop trauma related symptoms. Different individual, family and neighbourhood factors can play a role in distinguishing resilient from non-resilient children. These factors include age, meaning assigned to an event and mental efficiency and energy (Van der Hart, Nijenhuis & Steele, 2006; Leon, Ragdale, Miller, Spacarelli, 2008). Children who are exposed to unstable community environments (for example high crime rate) or home environments (for example parental alcohol abuse) and do not receive adequate social support are more likely to develop trauma related symptoms (Jaffee, Caspi, Moffitt, Polo-Tomás & Taylor, 2007).

Children present with various symptoms when they experience trauma. The severity, intensity and number of different traumas predict the severity of these symptoms (Briere, et al., 2008). The Trauma Symptom Checklist for Children (TSCC) measures the presence and intensity of six different symptom domains, namely anger, anxiety, depression, sexual concerns, posttraumatic stress and dissociation (Briere, 1996). The TSCC is the quantitative instrument that the candidate is going to use for this study and therefore the different symptoms of trauma will be discussed as measured by this checklist.

### **2.4.1 ANGER**

The anger and rage of the traumatised child, especially children with complex trauma, can be quite severe. Anger can be described as a normal way of releasing energy, after which the emotion that

triggered it can be explored in a calmer state. Evertt and Gallop (2000) note that when children have been traumatised, they can turn their anger inwards (e.g. self-mutilation) or may display it outwards (e.g. inappropriate rage seemingly without provocation).

Wieland (1998) formulated the Internalization Model of child abuse. According to the author, the maltreated children can internalise the belief that they are different or damaged. This may lead to the child becoming self-abusive through, for example, self-mutilation, alcohol abuse, or drug abuse. These children may also internalise that they are powerless, which can result in alternating reactions of learned helplessness or aggressive behaviour. Terr (2003) agrees and proposes that this clinical picture of the young person alternating between numbing and rage can eventually lead to the development of borderline personality disorder.

## **2.4.2 ANXIETY**

Persuasive evidence of a variety of studies suggests that people who experienced childhood trauma are at risk of developing mental health problems, including anxiety (Heim & Nemeroff, 2001). Fong and Garralda (2005, p. 77) define anxiety as “an emotion, an unpleasant feeling of tension or apprehension accompanied by physiological changes such as increased sweating, shaking, a dry mouth and gastrointestinal symptoms”. Heim and Nemeroff (2001, p.1023) report on a study that was done with 2000 women. The results revealed that those who were maltreated as children, presented with more symptoms of depression and anxiety than those with no history of abuse.

Anxiety can be both a symptom of trauma and a predictor of the presence of trauma symptoms. Fong and Gerralda (2005) indicate that children with pre-existing anxiety are more susceptible to developing posttraumatic symptoms, and traumatised children may meet the criteria for one or more anxiety disorders.

Many children, who have experienced trauma, develop increased anxiety and fear that is directly and indirectly related to their traumatic experiences. They may also become increasingly dependent and fearful of separating from their caregivers. Cortes et al. (2005) explain that traumatised children spend considerable energy on avoiding thoughts and feelings concerning their traumatic experiences, which leads to the exhaustion of their energy. This may in turn lead to the development of anxiety. Trauma can also change the way the children perceive their world and how they respond to it, which may also lead to the development of anxiety.

## **2.4.3 DEPRESSION**

Depression is a well-known symptom of trauma. Corby (2006) states that there are several studies that positively link depression to child maltreatment. Paileer, Kassam-Adams, Datner and Fein (2007) agree but further state that depression is especially a risk factor when the child has been violently injured. Stuewig and McCloskey (2005) positively link depression and delinquency with

child maltreatment. There is also evidence that adolescents who present depression after trauma can engage in risky behaviour such as alcohol abuse and suicide attempts. On the other hand depression manifests as aggression, rage and anxiety in younger children (Kagan, 2004). Trauma has also been positively linked to psychosis (Briere & Scott 2006) and therefore the social worker must be alert to the possibility of trauma exposure among those children who present with depression and psychosis.

#### **2.4.4 SEXUAL CONCERNS**

Children who have been sexually abused, raped or exploited may experience either sexual distress or sexual preoccupation (Briere, 1996). Brooks, Harris, Thrall and Woods (2002) link feelings of depression/stress with sexual risk behaviour (e.g. sex without birth control), as a form of self-destruction. Loeb et al. (2002) maintain that some adolescents may feel that they gain control and power over a situation that left them powerless as victims of abuse. According to the Internalisation Model of Wieland (1998), the child may internalise that being sexually active is associated with good things happening to him/her, and therefore might engage in hypersexual behaviour. The child may however also internalise that her/his sexuality equals negative feelings, and therefore might refrain from healthy sexual relationships in adult life. Sexual abuse may have been a physically painful experience for the child, which may cause feelings of distress associated with sexuality.

#### **2.4.5 POSTTRAUMATIC STRESS (PTS)**

Posttraumatic Stress (PTS) encompasses a collection of thoughts, feelings, reactions and behaviour that follows the experience of a distressing incident. This experience is usually outside the normal range of human experience. The symptoms of PTS can occur days, month or even years after an incident took place. Van der Kolk et al. (2007) explain that the responses to a traumatic event include symptoms of several disorders, for example Posttraumatic Stress Disorder, Acute Stress Disorder, General Anxiety Disorder, Major Depression or Adjustment disorder. Other symptoms may be for example family violence or substance abuse. Intrusive, hyperarousal and avoidance symptoms will be briefly discussed, as it is the PTS symptoms measured by the TSCC (Briere, 1996).

Intrusive symptoms can present in different forms, such as nightmares, flashbacks, intrusive images and even physiological reactions when confronted with a reminder of the trauma (Ehlers, Hackmann & Michael, 2004). Re-experiencing of the traumatic event is often the symptom of traumatic stress that moves clients to seek help, as this experience can be very distressing (Holmes, Grey, & Young, 2005). Social workers must be aware that school-aged children may be unable to abstractly describe the re-experiencing, and may describe it as concrete physiological complaints (Cook-Cottone, 2004).

Avoidance due to PTS can take on different forms, for example alcohol and drug abuse, keeping away from possible reminders of the trauma or using dissociation as a creative coping mechanism to prevent trauma memories surfacing in the conscious mind. Van der Kolk et al. (2007) postulate that the avoidance of triggers are aggravated by the general numbing of the person's responsiveness to certain emotional aspects. It is better for the person to feel nothing than to feel afraid, irritable or upset.

People with PTS tend to numb their emotional reactions, but their bodies continue to react in response to certain stimuli as if still in a threatening situation. Hyperarousal can take on diverse forms, for example hypervigilance or elevated startle response. This chronically hyperaroused state however deprives the autonomic nervous system from its normal function, viz to react in a threatening situation (Van der Kolk et al., 2007) and therefore discontinues to be a reliable guide for action in distress. According to Terr (2003), numbing may be absent in children who had a single traumatic experience, but can be severe in children with repeated childhood trauma. In their study Malta, Wyka, Giosan Jayasinghe and Difede (2008) found that numbing is a risk factor for the development of chronic PTSD.

Amongst others, any of these abovementioned PTS symptoms may develop in any combination after a shocking event. Vasterling and Brewin (2005) point out that PTSD is diagnosed when a certain amount of each of re-experiencing, numbing and avoidance, and excessive arousal symptoms are present. What sets PTSD apart from other diagnoses is the symptom cluster of re-experience (Beaulieu, 2004). According to the DSM-IV-TR (2000, p. 463) posttraumatic stress disorder (PTSD) can be defined as follows: "PTSD is an anxiety disorder precipitated by exposure to a traumatic life event that entails a life threat or serious injury to one's self or one's integrity, learning of an unexpected or violent death or serious harm to a significant other, or witnessing a violent or threatening event".

Van der Kolk (2005) states that the diagnosis for PTSD in the DSM IV is applicable for adults but does not capture the effects that trauma has on the development of children. Van der Kolk (2005) elaborates that if a child experiences a single traumatic incident, her/his emotional and behavioural response would match the description in the DSM IV for Posttraumatic Stress Disorder. Complex trauma, however, permanently alters the functioning of the mind and brain. Cook et al. (2005) postulate that children exposed to complex trauma experience lifelong problems and have difficulty in regards to affect regulation, behavioural control and self-concept. Van der Kolk (2005) proposes a new diagnosis for childhood trauma for the DSM V in 2011, namely *Developmental Trauma Disorder*. With this diagnosis the author attempts to address the difference between the effects of prolonged trauma on an adult, versus the effect on a child. Social workers in South Africa are not allowed to make the diagnosis of PTSD, but must be aware of the symptoms.

## 2.4.6 DISSOCIATION

Dissociation is a phenomenon that has been known for over a hundred and fifty years. Moreau de Tours was the first to describe dissociation, in an attempt to understand hysteria. The studies of Pierre Janet followed in 1887, and he described dissociation as an organised division of the personality (Diseth, 2005; Nijenhuis, Van der Hart & Steel, 2004; Rothschild, 2000; Van der Hart, Steele & Brown, 2004; Van der Kolk & Van der Hart, 1989). Myers (cited in Nijenhuis et al., 2004) did ground breaking work in describing structural dissociation as the division between the apparently normal personality (ANP) and the emotional personality (EP). The concept of structural dissociation has been studied further in the works of Van der Hart, Steele, Nijenhuis and Brown.

According to the theory of structural dissociation, the ANP is described as the part of the personality that involves the management of our daily lives. It helps traumatised people to function normally, as they did before the traumatic experience, or what is perceived as normal in the society. The ANP is associated with partial or complete amnesia, avoidance of the traumatic memories, or numbing. The EP, by contrast, is the part of the personality that is stuck in the traumatic memory that fails to integrate with the narrative memory of the experience. It therefore responds to perceived threats while stuck in the past traumatic experience (Van der Hart et al., 2004, 2006 & Nijenhuis et al., 2004). Hartman (2008b) concludes that the EP keeps the traumatic memory and the ANP maintains the dissociation.

Structural dissociation can be divided into primary, secondary and tertiary dissociation and can be defined as follows (Nijenhuis et al., 2004; Van der Hart, 2006):

*Primary structural dissociation* is dissociation in its most elementary form, where there is a division between the EP and the ANP, but the ANP is still the dominant part of the personality. The EP is still not autonomous in daily life. This definition encompasses simple PTSD.

*Secondary structural dissociation* is more complex and usually develops because of prolonged and overwhelming trauma. The EP is subdivided, while the ANP is still intact and encompasses complex PTSD, Disorders of Extreme Stress and Dissociative Disorders not otherwise specified (DDNOS).

*Tertiary structural dissociation* is the most complex form of dissociation and entails that both the ANP and EP are subdivided. This type of dissociation occurs after acute and chronic trauma and therefore no consistent pre-trauma personality could develop. Van der Hart et al. (2004) notes that the subdivision of the ANP does not necessarily occur while in the trauma situation, but can also take place when certain inescapable aspects of daily life resemble the trauma circumstances and therefore reactivate the memories associated with the trauma. Van der Hart et al. (2004) use the example of a sexual abuse victim who fell pregnant and had to undergo the subsequent physical examinations by her doctor, which reminded her of the abuse. She developed a new ANP in order to cope with these examinations and avoid the traumatic memories. Dissociative Identity Disorder (DID) falls under the category of tertiary dissociation.

The description of structural dissociation clearly indicates that dissociation exists on a continuum of complexity. Each dissociative part of the personality must be identified and subsequently explored. The content must then be constructed and integration must be promoted.

## **2.4.7 Conclusion**

In conclusion, it is thus evident that there are significant trauma related symptoms. These symptoms can never encompass the whole impact of a traumatic experience, but can help social workers to formulate a useful intervention plan. As previously mentioned, the types of traumatic events and the subsequent psychosocial effects thereof are predicted by various individual, social and cultural variables.

South Africa is a country that prides itself on its progressive Constitution and Bill of Human Rights, which enshrine the basic rights of its citizens. It is, however, also a country known for circumstances that may lead to childhood trauma. During the past decade for example, extreme levels of violent crime have overshadowed political violence. Hamber (1999) goes as far as to state that being a victim of violent crime in South Africa has become a normal feature in the lives its citizens. HIV and AIDS and child maltreatment are also problematic phenomena presenting in this country. Therefore it is necessary to understand the spectrum of childhood trauma in South Africa, so that social workers can effectively assess and address these unique circumstances and unfortunate consequences. In the following section the spectrum of childhood trauma will be discussed.

## **2.5 THE SPECTRUM OF CHILDHOOD TRAUMA IN THE SOUTH AFRICAN CONTEXT**

### **2.5.1 INTRODUCTION**

The circumstances and environment of traumatised children are frequently characterized by domestic violence, abuse, neglect and other detrimental factors for child development. For some children in South Africa, their unstable home environment is compounded by poverty, racism, community violence, disease, and violent crime. Xenophobia is another pressing issue in various communities South Africa that is causing great concern worldwide, and especially for non-South African people living in South Africa. Child maltreatment is a universal phenomenon, and poses challenges for all social workers worldwide. During the past decade, rapid urbanisation became a characteristic of South Africa, presenting problems concerning social welfare (Jewkes, Penn-Kekana & Rose-Junius, 2005). Most parents cannot afford proper childcare, and therefore children are vulnerable to possible abuse and maltreatment, as the neighbourhoods are in many instances unsafe. Dubowitz and Bennett (2007) support this statement by stating that the different

community factors such as unsafe neighbourhoods and insufficient recreational facilities increase the risk for the prevalence of child maltreatment. The HIV and AIDS pandemic is also causing dire circumstances, which may lead to childhood trauma, for instance the loss of a parent. The candidate will briefly discuss each of these factors in order to shed light on the spectrum of childhood trauma in the South African context. It is however important to realise that there are numerous other circumstances that may lead to childhood trauma.

### **2.5.2 VIOLENT CRIME IN THE COMMUNITY**

National and international studies indicate that either witnessing violence or being the victim of violence can result in a range of negative outcomes and difficulties. These include mental health disorders, altered cognitive functioning, impaired social functioning, reduced educational outcomes, and somatic complaints (Ladd & Cairns, 1996; Lynch, 2003; Ward, Flisher, Zissis, Muller and Lombard, 2001). Violent victimisation can be defined as behaviours and actions by individuals or groups of individuals that intentionally threaten, attempt to threaten, or inflict physical harm on another individual, e.g. rape, aggravated assault, murder and robbery (Ruback & Thompson 2001). Violence crime can therefore be described as deeds that are prohibited by law and punishable by a court of law.

According to Hirshowitz and Orkin (1997), the exposure to violent victimisation in South Africa has resulted in a large proportion of the population suffering from symptoms of Posttraumatic Stress Disorder (PTSD). Children in South Africa are progressively exposed to violent crime. Many of these children were the victims of violent behaviour and others just the unfortunate witnesses. Some were repeatedly exposed. Simply overhearing a conversation about an instance of violent crime may traumatise some children. This may lead to the possibility for them to become aware of their vulnerability at a very young age (Lewis, 1999).

Xenophobia is another violent occurrence in South Africa that may lead to possible traumatisation. This phenomenon is so complex that it is often only recognized when already out of hand. Campbell (2003, p. 72) corroborate that the basis for the victimisation of strangers is the perceived fear that these immigrants are a threat to the "cultural, political, and economic stability" of that particular realm. Xenophobia is not a new occurrence in South Africa; events of intolerance towards non-citizens have been progressively reported since 1994 (Crush, 2000).

### **2.5.3 CHILD ABUSE AND NEGLECT**

Child maltreatment is a universal problem and not unique to the South African context. It is however important to note that there are circumstances in South Africa that promote the maltreatment of children (Jewkes et al., 2005; Lewis, 1999). Child maltreatment can be subdivided into physical abuse, emotional abuse, sexual abuse, and neglect.

Child abuse and neglect are social constructs that are differently defined by diverse cultures and societies (Dubowitz & Bennet, 2007; Pierce & Bozalek, 2004; Corby, 2006). Panzer (2008, p. 38) defines child maltreatment as an action of insufficient care that creates an actual or potential risk to harm a child mentally or physically. Glaser (2000) however declares that the definition of child abuse and neglect must not be based on the *intention* of a person to harm a child, but rather on the *deed* of the person being out of the norm range of usual interaction with the child. This definition links with the cultural element of child maltreatment, as in some cultures it is still customary to administer corporal punishment with intent to harm. Some caregivers feel this is an appropriate way to discipline a child. In other cultures, however this is considered child abuse.

Glaser (2000) proposes that maltreatment has been linked with psychopathology during the past decade. The main long-term consequence of child maltreatment is its adverse effect on the developing brain (Panzer, 2008; O' Hagan, 2006; Schore, 2001; Van der Kolk 2002, 2005, 2007). Child maltreatment can thus be linked with mental health problems in children and has both long-term and short-term consequences.

#### **2.5.4 HIV AND AIDS**

This destructive disease has a devastating effect on our children, as some are orphaned, while others are themselves infected. The United Nations Children's Fund (UNICEF) (2008, p. 14) declares that "South Africa has the highest AIDS burden in the world, with an estimated 5.5 million people living with HIV", of which 250 000 are children.

In their paper, Ebersöhn and Eloff (2002, p. 78) highlight some effects that HIV and AIDS have on children. The authors divide the consequences into seven categories, namely (1) demographic effects; (2) health effects; (3) family-life effects; (4) welfare effects; (5) educational effects; (6) psychosocial effects; and (7) orphanhood effects. All of these categories in some way or another may contribute or directly result in children experiencing trauma. Smit (2007) emphasises that HIV and AIDS traumatise children as they might have lost one or both parents and are left in the care of older siblings or be the caregivers of younger siblings themselves. These circumstances lead to the children being vulnerable for abuse and exploitation. It is thus clear that HIV and AIDS can be regarded as more than just a health problem.

## **2.6 SUMMARY**

Trauma is a complex phenomenon that can be defined as an experience that makes the victim feel helpless and has a recurrence in one or more of the sensory, emotional, or cognitive systems. It is important for social workers to understand the neurobiology of trauma, in order to render effective treatment. Human beings and animals have the same stress response in the face of danger, namely the fight, flight and freeze response. There are certain pathways that trauma follows in the brain, involving different structures and neurotransmitters of the frontal and central areas of the

right cerebral hemisphere. Research has also found that over-stimulation of the amygdala suppresses the functioning of the hippocampus. This has an impact on the storage of the memory of the traumatic material. The hippocampus is responsible for giving a memory narrative. If it is suppressed, the memory lacks verbal context and results in unintegrated implicit and explicit memories. If the trauma memories are not integrated, trauma symptoms may manifest.

People experience different symptoms due to trauma. Anger can be expressed internally or externally, and anxiety can be either a precipitating factor for trauma reactions or a symptom of a trauma reaction. Depression is also a symptom of trauma and can be expressed in the form of anger or anxiety. Children who have been sexually assaulted may have sexual concerns, in the form of either sexual distress or sexual preoccupation, or a combination of both.

Posttraumatic stress is a well-known symptom of trauma. Van der Kolk (2005) proposes a new diagnosis for children who were exposed to trauma, namely developmental trauma disorder. According to the author, PTSD is not a child friendly diagnosis. Dissociation is another important symptom of trauma. Contemporary research proposes the theory of structural dissociation to explain this phenomenon. Structural dissociation is divided into three categories, namely primary structural dissociation, secondary structural dissociation and tertiary structural dissociation. These categories are based on the division of the apparently normal personality and the emotional personality. By understanding all the facets of childhood trauma, the social worker is capable of rendering effective services.

South Africa is a diverse country with a wide spectrum of possible indicators of childhood trauma. Political violence in the years leading up to 1994 has been replaced with violent crime and xenophobia in the last 14 years. Children are exposed to these factors from a young age, undermining their innocence and sense of safety. Child maltreatment is a universal problem and South Africa is no exception. Cases of child abuse and neglect are reported on a daily basis. HIV and AIDS are a vivid reality for the rainbow nation, causing children to be orphaned or themselves infected with HIV. It is therefore important that social workers in South Africa render goal-focused services on a micro, mezzo and macro levels, in order to fulfil the dream of a developmental social welfare focus. In the next chapter, EMI will be discussed as a brief and cost-effective intervention strategy for childhood trauma.

## **CHAPTER 3**

# **EYE MOVEMENT INTEGRATION THERAPY (EMI)**

### **3.1 INTRODUCTION**

In this chapter, the role of the social worker in trauma intervention will be discussed. EMI is the method of trauma intervention that was utilised during this study. EMI is a neuro-therapy, which focuses on the integration of the fragmented memory developed during trauma. In 1889 already, Pierre Janet realised that memory can be stored on a narrative as well as a sensory level (Van der Kolk & Van der Hart 1989). These findings are now supported by contemporary research. The brain has the natural ability to integrate these memories when the survivor thinks or talks about his/her traumatic experience. Ehlers et al. (2004) however emphasize that for some victims of trauma this normal process does not take place and these people therefore need treatment to reconstruct and integrate the traumatic material. Parson (1998) states that representational analyses, together with integrating memory work are key elements for successful trauma therapy.

In order to understand the utilisation of EMI, it is necessary to understand its theoretical underpinning. EMI has its roots in neuro-linguistic programming (NLP). Therefore, the candidate will give an overview of NLP. Although the neurological mechanism of EMI remains a mystery, Beaulieu (2004; 2005) presents some possible explanations for the working of EMI, which lies in the smooth pursuit eye movements (SPEM), binocular rivalry and interhemispheric switching, as well as eye movements and sleep . These mechanisms will be discussed in this chapter. Eye movement and desensitization reprocessing (EMDR) is another intervention that use eye movements in a therapeutic way. EMDR is different to but in some aspects also similar to EMI. The candidate will give an overview of EMDR. Finally, the importance of proper evaluation of the child as a candidate for EMI will receive attention.

### **3.2 THE ROLE OF THE SOCIAL WORKER IN ADDRESSING CHILDHOOD TRAUMA**

As mentioned in Chapter 1, social workers cannot choose which problems their clients have. It is therefore imperative that they acquire a broad spectrum of skills to assist individuals, groups, communities, and organisations as effectively as they can. In short, social workers must become generalists. Mumm, Olsen and Allen (1998) emphasized that being a generalist practitioner entails that social workers must concern themselves with both the individuals' troubles, as well as with the social problems that contribute to these troubles. Kirst-Ashman & Hull (2006, p. 7) define

generalist practice as follows: "The application of an eclectic knowledge base, professional values and a wide range of skills to target systems of any size, for change within the context of four primary processes. First, generalist practice emphasizes client empowerment. Second it involves working effectively within an organisational structure and doing so under supervision. Third, it requires the assumption of a wide range of professional roles. Fourth, generalist practice involves the application of critical thinking skills to the planned change process". Not all social workers work in an organisational environment where service delivery can encompass the micro, mezzo and macro level. However, trauma as a phenomenon can still be addressed on all three levels, even if it is not within the same organisation. Social workers in larger organisations can for instance outsource services on a mezzo and micro level and concentrate on the macro level. Services on all three levels are, however, necessary to stop the detrimental effects of trauma on childhood. A short discussion will be given on service delivery on each of these levels.

### **3.2.1 TRAUMA INTERVENTION ON A MACRO LEVEL**

Wandersman and Florin (2003, p. 441) describe community-level intervention as "multi-component interventions that generally combine individual and environmental change strategies across multiple settings to prevent dysfunction and promote well-being among population groups in a defined local community". A community intervention for preventing child abuse might combine a school curriculum for youth to promote safe sex and be aware of possible abusive situations, together with a media campaign aimed at parents to become aware of child abuse and how to protect their children and identify the symptoms. In the context of South African history, some forms of violence are regarded as an acceptable way of dealing with conflict, inflicting punishment or gaining power (Petersen, Bhana & McKay, 2005). Van der Hart et al. (2006) emphasize that previous knowledge and training in a specific situation can be a significant factor for preventing the onset of trauma related symptoms. Therefore, prevention programs must be implemented in communities in order to educate and make the members knowledgeable. This will build the resilience of community members and empower them to cope with risk influences. Children, who are, for instance educated about their rights according to the Constitution, would be able to report abuse more readily.

Trauma does not influence just the individual, but also the child's family and the community. Their responses can either help or hinder the recovery process. A multi-systemic resilience-orientated approach (Walsh, 2007) towards trauma addresses its impact on the family and strengthens the capacity of the whole system to heal and grow. The resilience of a community not only allows them to overcome tragedy, but also ensure that future generations would be able to survive and endure. Landau (2007) proposes that the ability of a community to overcome trauma and to be resilient lies in their relationships with each other as well as their ownership of their culture. Therefore the first obvious step is to implement community-driven programs to help communities to identify their own resources. They can be helped to see their strengths, not just their vulnerabilities, and learn to support each other. Research has shown that the level of social support that a trauma victim gets from the community has an effect on that person's ability to

effectively cope with trauma (Yule, 1999). Members becoming compassionate supportive witnesses can transform violence in communities. This can change the behaviour and reactions of families and communities.

### **3.2.2 TRAUMA INTERVENTION ON A MEZZO LEVEL**

Intervention on mezzo level entails working with a small group (Kirst-Ashman & Hull, 2006) and can have different goals. Group work can be implemented for different goals, like helping children to elicit strengths and therefore build on resilience, educate children at risk, or have a therapeutic focus. The basic philosophy of therapeutic group work is that the group is the most influential factor in the intervention. By working in a therapeutic group, traumatised children may discover that they are not alone but other children also encounter the same problems (Rivard et al., 2003). This can be very empowering and helpful. Group work can facilitate relief for social workers, as they are able to address a part of their caseload at the same time. Geldard and Geldard (2008) are of the opinion that therapeutic groups give the members the opportunity to get in touch with their emotions and modify their beliefs and behaviour in a non-threatening environment. Social workers can also utilise groups as a crisis intervention method, when trauma debriefing is necessary with a larger group of children (Bell, 1995). An example would be trauma debriefing with the children at the Nic Diedericks technical high school in Krugersdorp, where one of the pupils allegedly killed another, and injured three others with a samurai sword on 18 August 2008 (The Star Newspaper, 2008).

Group work can however be an unsuitable option for some children and therefore the members must be assessed before implementation. Children who are for example highly sexualised, impulsive, or aggressive do not prove to be ideal candidates for group work (Kaduson & Schaefer, 2006). Psychoeducational groups can also be beneficial in the field of childhood trauma. Social workers can use these groups to give information to children on a topic and help them to direct their behaviour and make informed choices.

### **3.2.3 TRAUMA INTERVENTION ON A MICRO LEVEL**

Social work on a micro level usually entails service delivery to individual people (Kirst-Ashman & Hull, 2006). Individual services may include placement in a home for the disabled, statutory placement of a child or individual therapy. In some countries, like the United States of America, social workers must acquire credentials that reflect a certain level of qualification in order to render therapeutic services, for instance a master's degree in clinical social work (Bentley, 2002). Although the South African Council for Social Service Professions currently considers the accreditation and subsequent credentials of certain social work specialities, it is not yet a requirement.

There are a wide variety of therapeutic interventions available for social workers to implement with children, including solution focused therapy (Berg & Steiner, 2003), hypnotherapy (Wester &

Sugarman, 2007), gestalt (Oaklander, 1988) and short-term play therapy (Kaduson & Schaefer, 2006). Brief therapeutic treatment methods are currently influencing social work practice and are a popular approach for individual therapy. The advantages of short-term therapy are that it is not only cost-effective and less time consuming, (Cooper & Lesser, 2002), but also effective (Maguire, 2002).

Some of these brief therapies are strengths-based whereas others are problem-focused. Berg and Steiner (2003) in their book on solution-focused therapy with children, argue that a traumatic experience is life changing. Therefore, children must be helped to accept what has changed and reshape their lives so that they can find meaning to their lives and still be productive. The candidate agrees, but is of the opinion that solution orientated and problem-focused practice builds on each other, and that a dual focus is more beneficial. Looking at the definition of generalist practice, social workers must assess every individual situation and implement the intervention strategy that would be most beneficial within that situation with that specific child. McMillen, Morris and Sherraden (2004, p. 324) highlight that “consumers do not seek social work services when their lives are problem-free. Moreover, problems often cannot be ignored because they serve as constraints to building capacity, or because consumers are in crisis and solving their problems (such as meeting basic needs for food, shelter, and safety) must come first in the interest of their well-being.” In focusing and working on the problem first, some children are empowered to identifying and utilising their strengths and potential.

EMI is indeed a method that is both problem focused and capacity building. After the trauma memories are integrated, the same eye movements can be used to activate resources of the client (Hartman, 2008c). Explaining this procedure however goes beyond the scope of this report. Therapeutic interventions involving eye movements are quite revolutionary and can elicit both positive and negative reactions. Lavin, Lazrove and Van der Kolk (1999) emphasize that recent studies on trauma and memory indicate the possibility that traumatic experiences are partly stored as somatic sensations in emotional affect states, which means that trauma cannot be processed successfully with verbal therapies alone. EMI is one of the available eye movement therapies, which is also the intervention used during this research. With EMI, the social worker focuses on the problem in order to help the child to integrate trauma experiences. Beaulieu (2005) stresses that EMI allows the person to access multi-sensory contact with trauma, as well as positive memory traces, and assists in integrating the fragmented traumatic implicit memory with the traumatic explicit memory. Beaulieu (2004) undertook a research study to investigate the effectiveness of EMI with adult survivors of trauma. Qualified social workers and psychologists participated in the study and received specialised training in EMI. The results showed a marked improvement in the respondents' posttraumatic and dissociative symptoms.

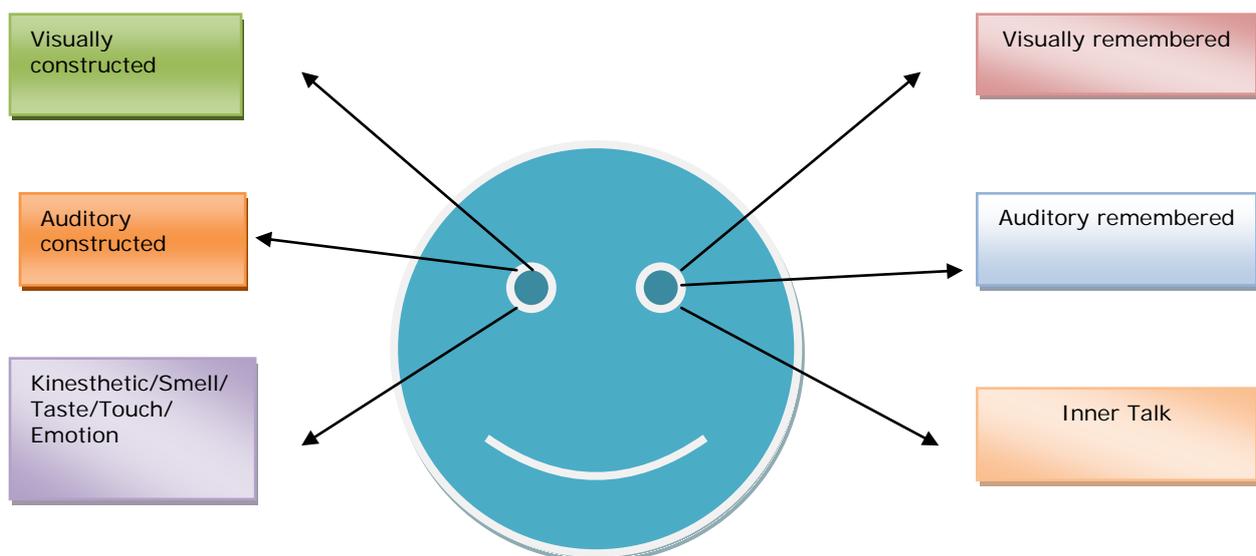
EMI has its roots in neuro-linguistic programming (NLP). Steve and Connirae Andreas researched the possible links between eye movements and its therapeutic potential, and they were intrigued about the possibility that eye movements can influence thought, as it seemed that thought influenced eye movements. Subsequently EMI was developed. Beaulieu studied under Steve and

Connirae Andreas, and with their consent started to develop their technique further. The next section of this chapter will be devoted to the discussion of the theoretical aspects of EMI, with the focus on neuro-linguistic programming, eye movements in general, eye movement desensitization and reprocessing (EMDR), and lastly evaluation of the client for EMI.

### 3.3 NEURO-LINGUISTIC PROGRAMMING

According to Tosey and Mathison (2003), the term “neuro-linguistic programming” (NLP) was invented by Bandler and Grinder and refers to the systemic links between a person’s internal experience (neuro), language (linguistic) and his/her patterns of behaviour (programming). According to Young (2004), there is no definite definition for NLP, as NLP is how a person perceives the world, and therefore NLP differs from person to person and can therefore be described as a study of a person’s subjective experience.

Dilts (1998) proposes that NLP was the first to discover and explore the relationship between eye movements, specific cognitive processes and the senses/modalities. People experience the world through their senses. NLP refers to the senses as representational systems and posits that a person stores his/her experiences in the same systems (Harman & O’Neil, 1981). Dilts was one of Bandler and Grinder’s students and conducted several studies from 1977 in understanding and coding of eye movements as accessing cues (McDermott & Jago, 2001). An accessing cue can be described as the subtle behaviour of the therapist that will help to both trigger and indicate in which representational system the information is stored. Subsequently, after studying the results and his observations, the following eye movements, as presented in Figure 3.1, were documented.



**Figure 3.1: Eye accessing cues of NLP (Bandler & Grinder, 1979 p.25)**

Dilts (1994) describes how different eye movements can be used to change behavioural patterns. EMI uses 22 different eye movements, which crosses all the quadrants, as accessing cues to the

trauma memory that is stored in the modalities. The different eye movements of EMI will be discussed in more depth in Chapter 4.

NLP is the root of EMI, but does not explain the mechanisms of this particular intervention method. Research on eye movements is therefore necessary to investigate the correlation between eye movements, cognition and the functioning thereof.

### **3.4 EYE MOVEMENT, COGNITION AND FUNCTIONING**

The precise mechanism of functioning of EMI is still unknown. Rajad (2001, p. 1) is a medical doctor and the chairperson of the health centre of the University of Connecticut. Rajad cites different medical procedures that are well known and widely accepted, regardless of the fact that its mechanisms of functioning are still unknown. The candidate agrees with his statement:

“I believe, in the ultimate analysis, that it is hubris to think that no phenomena are valid unless we understand its mechanisms of action. We seem to understand so little about human biology and physiology that a vast majority of what happens to us can simply not be understood, at least with today’s knowledge base. Should we therefore dismiss as quackery even something that does work merely because we don’t know how it works?”

Beaulieu (2004; 2005) underlines that although the association between eye movement and thought processing is accepted, it does not explain the neurological mechanisms of EMI. Beaulieu speculates about possible explanations for the effectiveness of EMI, which will briefly be discussed.

#### **3.4.1 BINOCULAR RIVALRY AND INTERHEMISPHERIC SWITCHING**

The first possible explanation is that of a delayed switch between the two hemispheres of the brain. In their work, Pettigrew and Miller (Pettigrew & Miller, 1998; Miller et al., 2000) propose that there is a delay in interhemispheric switching that is ‘sticky’ in bipolar disorder.

In order to study the interhemispheric switching, Pettigrew and Miller (1998, 2000) used binocular rivalry, which is the alternating of perceptual states when different images are presented to the eyes separately. This causes the eyes to rival for conscious perception. Beaulieu (2004) speculates that Pettigrew and Miller’s findings may begin to explain what happens during an overwhelming experience. The senses cannot form a single perception out of the overwhelming traumatic information, as the switch between the hemispheres is altered.

Beaulieu (2004) suggests that an overwhelming experience slows the rhythm of the switch between the two hemispheres. The candidate also speculates, about the possibility that the

rhythmic smooth movements of EMI will restore the normal switch and communication between the hemispheres. This will ultimately help to integrate the fragmented memory.

### **3.4.2 SMOOTH PURSUIT EYE MOVEMENTS (SPEM)**

EMI utilises smooth pursuit movements of the eyes. Smooth Pursuit Eye Movements (SPEM) are slow eye movements, that estimate the velocity of the eyes to that of the small moving object in order to keep it in range of the fovea, which is the small pit of the retina (Their & Ilg, 2005). Extensive studies have been done in regard to smooth pursuit eye-tracking deficits (ETD) in schizophrenia. Kumar et al. (2001, p. 1291) studied the ETI of 55 young adolescents who had childhood onset of psychotic disorders. According to their findings, the subjects with childhood-onset of schizophrenia and other psychotic disorders had qualitatively poorer eye tracking than healthy children. Beaulieu (2004) speculates that cognitive processes and eye movements may be connected. The author also speculates that, because of the sensory deficits that schizophrenic patients have, in conjunction with ETD, this is perhaps a possible indication of the integrative potential of eye movements.

According to literature, there is only one study available on the ETD and history of childhood trauma. Irwin, Green and Marsh (1999, p. 1230) studied a sample of 100 Australian adults. The subjects had to perform a visual tracking task along with a self-report measure of childhood trauma. According to the findings, there is a relationship between SPEM deficits and childhood trauma. The authors stipulate that further investigation is needed to clarify the basis of the association between the ETD and the traumatic experiences. Beaulieu (2004, p. 95) points out the following in this regard, "If further research would confirm that trauma victims may acquire SPEM deficits, this would suggest that eye movement control systems are intimately linked with the amygdala/hippocampal/cortical systems known to be affected by overwhelming experiences".

It is important to take the maturation of the SPEM into consideration when doing EMI with children. Salman et al. (2006) conducted a research project to study the SPEM in children. The subjects had to follow an object horizontally and vertically, while the speed of the object increased. According the authors there are conflicting reports in literature concerning the maturation of SPEM in children. However, according to their study, smooth pursuit increases with age, and children in mid adolescence reported adult values. The authors concluded that smooth pursuit gains are lower in children than in adults, which implies that the smooth pursuit system in children is less mature than in adults. Whether these findings have an influence on EMI is, however, unknown.

Van der Kolk (2007) proposes that 60% of trauma is stored in the visual modality. Spivey and Geng (2001) report on three experiments that were done to demonstrate that eye movements are used to coordinate elements from mental processes with elements from the visual field. Their conclusion are as follows, "more broadly, our results point to a concrete embodiment of cognition, in that a construction of a mental image is almost 'acted out' by the eye movements, and a mental search on internal memory is accompanied by an oculomotor search of external space" (Spivey &

Geng, 2001, p. 235). This conclusion might just shed light on the function of eye movements and the integration of traumatic memories.

### **3.4.3 EYE MOVEMENTS AND SLEEP**

There are four proposed stages of sleep (Breedlove et al., 2007; Freberg, 2006). Stage 1 and 2 can be described as light sleep. Stage 3 and 4 is usually deep sleep, also known as slow-wave sleep (SWS). It usually takes about an hour to progress through all four stages, whereafter the person briefly returns to stage 2. Then the person enters REM sleep (Breedlove et al., 2007; Freberg, 2006). This stage is named after the rapid movement of the eyes.

The disturbance of sleep is a core symptom of PTSD, such as nightmares, avoidance of sleep, night terrors and insomnia (Bader, Schäfer, Schenkel, Nissen & Schwander, 2007; Germain, Buysse, Nofzinger, 2008). Spoomaker and Montgomery (2008) maintain that sleep disturbance in PTSD patients is a primary feature of PTSD, and not just a secondary symptom. Sterpenich (2007) supports this opinion and adds that if sleep deprivation follows a new experience, the new information will not be effectively consolidated with hippocamal information.

The relation between sleep and memory processing is well documented and has enjoyed intensive study in the past decade (Habukawa Uchimura, Maeda, Kotrii & Maeda, 2007; Sterpenich et al., 2007; Stickgold, 2007). Both REM sleep and SWS are necessary for the consolidation of memory. Rasch, Buchel, Gais and Born (2007) conducted an interesting study, where they cued new memories during SWS sleep, by presenting an odour that has been presented as context during prior learning. The result of their study was that reactivation caused memory consolidation during sleep. Normal sleep patterns may however be disturbed because of a traumatic incident, which in return hinders the normal process of memory. Habukawa et al. (2007) report that, according to their study, that the PTSD patients showed a decrease in SWS.

Stickgold (2007) proposes that the consolidation of traumatic memory is a sleep-dependant process, and therefore the most effective way in consolidating trauma memories is to stage the same mechanisms in a waking brain state. The eye movements utilised in EMI resemble the eye movements that are present during sleep and it is therefore possible that this would contribute to the effectiveness of this technique.

It is thus clear that there are different possibilities that may explain the effectiveness of EMI. None have been tested however. Nevertheless, there is growing evidence to show that eye movements are associated with both the response to traumatic experiences and the resolution of these traumas. Beaulieu (2004, p. 105) points out that “the body of research on eye movements and associated brain activities, discussed above, clearly demonstrates that visual processing, eye movements, and cognition are inextricably linked. Even if a detailed map of the structural and functional networks still eludes us”. EMI is however not the only intervention that uses eye movements. Eye Movement Desensitization and Reprocessing (EMDR) is another innovative

therapy involving the eyes. Although no neuropsychological similarities have been identified, it is almost certain that EMI and EMDR share an important basis.

### 3.5 EMI AND EYE MOVEMENT DESENSITIZATION AND REPROCESSING (EMDR)

Both EMI and Eye Movement Desensitization and Reprocessing (EMDR) make use of eye movements as cues to access the traumatic material. EMDR was developed by Francine Shapiro in 1989 (Protinsky, Sparks & Flemke, 2001; Beaulieu, 2004). EMDR proved to be successful in reducing trauma symptoms (Högberg et al, 2008). Although there are some similarities between the two interventions, there are also distinct differences (Beaulieu, 2004). Both interventions make use of eye movements to relieve the symptoms of trauma, but while EMDR focuses on conscious cognitive restructuring EMI facilitates sensory integration. Both, however, focus on the integration of traumatic memories (Beaulieu, 2004; Protinsky et al., 2001).

Beaulieu (2004) stresses that both EMI and EMDR are able to retrieve the memory in all its capacity and intensity. Therefore, training and supervision are important factors when using these techniques in practice. However in order to differentiate between these two methods, it is important to be aware of the distinct differences in their protocols. The differences between the two methods, as proposed by Beaulieu (2004), are presented in Table 3.1:

EMI	EMDR
Use smooth pursuit eye movements (SPEM)	Use saccadic eye movements
Utilise 22 different movements	Utilise one lateral movement
Conducted at a speed convenient for the client	The speed of the movement is rapid
Utilise verbal accessing cues	No verbal cues are used
Only the eye movements are used	Can also involve tapping
Origin in NLP	Origin from a personal experience of Francine Shapiro

**Table 3.1: Distinctions between EMI and EMDR**

Even though there are differences in the protocol and the point of departure between these two methods, it is undeniable that there is a distinct link between eye movements, the limbic system and the relief of trauma symptoms. Lee and Drummond (2008) studied the effect of eye movement versus verbal instruction from the therapist, on the processing of trauma memories. They found that the eye movements, rather than the suggestions made by the therapist, were responsible for the reduction of distressing memories.

Another similarity between EMI and EMDR is that both accentuate the importance of assessing the client, in terms of the traumatic profile, as well as suitability for these treatment models. This will guide the social worker to decide whether EMI is the preferred method of intervention and if so, how to utilise it so that the child will reap the benefits.

## **3.6 EVALUATION OF THE CLIENT**

Before undertaking EMI, the social worker must conduct a thorough physical and psychological assessment of the child, to determine if he/she is a suitable candidate for this intervention. Beaulieu (2004) recommends that the therapist utilise the first session for this evaluation. This assessment encompasses the general and usual information gathered during a first interview/assessment, as well as specific information related to EMI. Certain physical and psychological aspects must be taken into consideration during the assessment process.

### **3.6.1. PHYSICAL CONDITIONS**

Beaulieu (2004) emphasizes that EMI is not one of the traditional psychotherapies and it sometimes elicits reliving some of the aspects from the trauma. The author stresses that EMI in itself does not cause these reactions, it simply releases this information from the fragmented memory. Some clients may experience some of the physical reactions they had at the time of the traumatic experience, for instance nausea (Beaulieu, 2004). Although it has not been researched, this may correspond with the "freeze discharge" theory, as described by Scaer (2005) and Lavine (1997), proposing that it is important for the person to complete the last physical action, in order to return to a state of equilibrium (see 2.3.2). It is thus important to prepare the child that he/she may experience some physical discomfort, but that it will pass when entering the next eye movement.

The most important physical aspect to evaluate is eye problems or eye pain. In practice, the candidate treated a client with severe trauma, who would have benefited from EMI. Unfortunately, he had eye problems due to an explosion, and therefore was not a suitable candidate for EMI. It is also recommended to remove contact lenses and glasses (Beaulieu, 2004).

Although EMI is not a dangerous therapeutic intervention, it is not recommended for clients with cardiovascular and cerebrovascular conditions. The client may experience brief physiological manifestations of stress, such as elevated blood pressure. As in all procedures, it is better to be safe. It is therefore important to get a full clinical history of the child before conducting any type of trauma therapy. There is no indication that therapy with eye movements triggers epileptic seizures. However Beaulieu (2004) cautions that heightened stress may be a risk factor for induction of a seizure.

Drug and alcohol use are important aspects to take into consideration when working with adolescents. Beaulieu (2004) stresses that people who are abusing substances are biologically not good candidates for EMI. The candidate had a client that abused heroin. She was not aware of the client's addiction until she tried to conduct the eye movements. The client was physically not able to follow the segments. Beaulieu (2004) mentions that these substances alter the brain's function.

### **3.6.2 PSYCHOLOGICAL CONDITIONS**

clients would not come for therapeutic intervention if they did not experience some level of distress (Beaulieu, 2004). It is thus important to assess the client's level of distress in order to determine whether the client is ready for EMI, as well as to determine the effectiveness of the therapy.

EMI is a treatment option for chronic and not for acute trauma symptoms (Beaulieu, 2004; D Beaulieu, personal interview, December 6, 2007). The author stipulates that at least four to six weeks must have passed since the traumatic incident. Beaulieu (2004) also points out that the brain has its natural way to deal with trauma and the integration of memories. It is only after four to six weeks that the success of the integration process will be evident. Beaulieu (2007) remarks that in her years of experience with EMI it has not proven to be a suitable intervention strategy directly after trauma.

A client must have the emotional energy to partake in EMI, as it is an intensive process. Beaulieu (2004) recommends that the therapist must evaluate the state of depression before starting with EMI. If the level of depression is too high, it is recommended to work on the client's ego strengthening prior to conducting EMI (Beaulieu, 2007).

Beaulieu (2004) recommends that the therapist must take special consideration in regard to psychosis, borderline personality disorder, or other dissociative disorders before applying EMI. The candidate is of the opinion that a therapist must not consider using EMI with such clients when he/she has not completed the advanced training.

## **3.7 SUMMARY**

Social workers are generalists and are therefore able to address certain phenomena on macro, mezzo and micro level. EMI is one among a variety of therapeutic intervention strategies available to social workers for working with children . It is a specialised trauma intervention strategy that has its roots in neuro-linguistic programming (NLP). Danie Beaulieu studied EMI under Steve and Connirae Andreas and developed the technique further with their permission. NLP however does not adequately explain the neurology behind the effectiveness of EMI.

The understanding of a procedure's functional mechanism does not determine its workability, but Beaulieu (2004; 2005) speculates about possible neurological explanations for the effectiveness of this technique. EMI utilises smooth pursuit eye movements (SPEM). The link between SPEM deficit and schizophrenia has been researched extensively. Schizophrenic patients also have sensory deficits. One study has been done on the possible link between SPEM deficit and trauma. Beaulieu speculates about the link between sensory and SPEM deficits. EMI might therefore restore the dysfunctional eye movements and integrate the sensory traumatic material. There is speculation that fragmented trauma memories are formed due to a "sticky" hemispheric switch. EMI might accelerate the speed of interhemispherical switching, and thereby integrate the traumatic memories. Several research studies indicate the function of sleep in the integration of memory. Trauma victims may suffer from sleep disturbances, which in return inhibit the natural integration process. The eye movement segments of EMI resemble some of the eye movements that are present during Stage 3, Stage 4 and REM sleep. It is possible that EMI therefore completes the process of integration in the wakeful state.

EMI and EMDR are both processes that utilise eye movements. There are similarities, as well as differences between these two procedures. They are both effective strategies although they do not have the same basis of origin. Before conducting an EMI session, it is important to determine the suitability of the child. There are physical considerations, as well as psychological considerations to take into account.

The relevant literature on childhood trauma and EMI for this study has been presented in chapters 2 and 3 respectively, and therefore the following chapter will consist of the methodology used during this research.

# CHAPTER 4

## RESEARCH METHODOLOGY

### 4.1 INTRODUCTION

Methodology is an important aspect of research. There is a vast amount of research done each year, and it is important to determine which of the findings are actually reliable. Gray, Williamson, Karp and Dalphin (2007) point out that we need to evaluate the process which produced the findings of the research in order to determine their reliability, thus the research methodology.

Two research approaches can be employed by a researcher, namely qualitative and quantitative approaches. Each approach has its own associated methodologies. A researcher can decide to utilise either one or both these approaches, depending on the nature of the study. Greene and Hogan (2005) highlight that the choice of approach depends on its appropriateness for a particular study. For the purpose of this study the candidate used methods associated with both approaches, referred to as multi-method design or triangulation.

The candidate provided a brief overview of the study's research methodology in Chapter 1. In this chapter however, the candidate will discuss the methodology in more detail in regards to the research design, data gathering, and population, sampling, and data analysis. The process of an EMI session will also be laid out and discussed in detail, as this is the independent variable of the study.

### 4.2 RESEARCH DESIGN

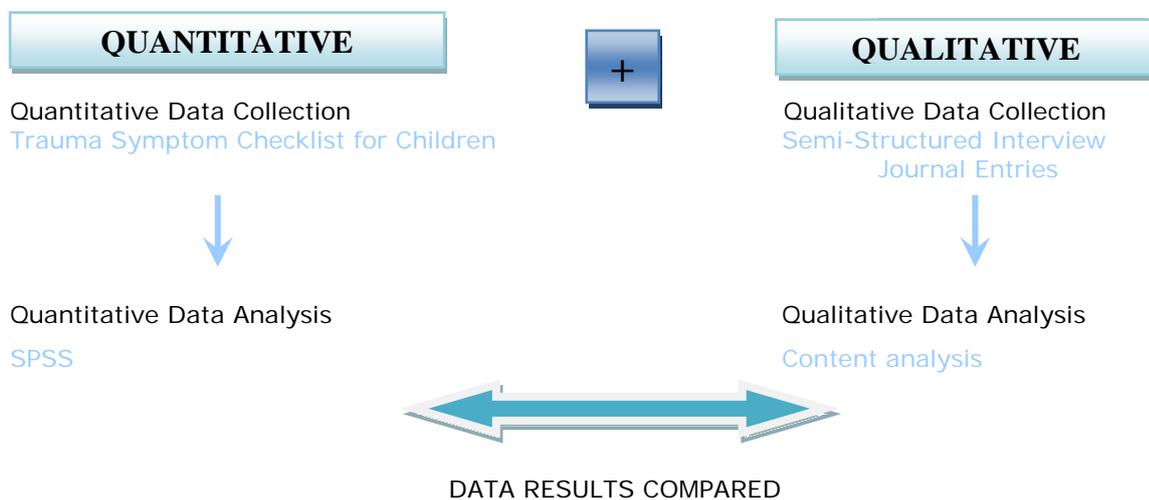
The candidate employed an exploratory research design in this study. According to Royse (2008), a researcher chooses an exploratory research design if there is little or no information available about the topic. Neuman (2000) validates this statement, but adds that an exploratory design is also used when a topic is relatively new. In the case of this study, both are applicable, as there is only one book and one article published on EMI specifically, and it is a relatively new field of intervention.

The main purpose of this study was to explore the usefulness of EMI with children, by means of assessing the challenges and benefits of the method as applied with children. The intention of the study was therefore not to investigate the effectiveness but rather the usefulness of EMI.

The candidate utilised a multi-method research approach. Johnson and Onwuegbuzie (2004, p. 17) define mixed method research as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study.” Brannen (2005, p. 176) states that when using mixed methods, there are at least four possible outcomes, namely corroboration (same results from both methods); elaboration (the qualitative data illustrate how the quantitative data apply in particular instances); complementary (the results of the two methods differ, but together they generate insight); and contradiction (the findings of the qualitative and quantitative data are in conflict with each other).

A multi-method approach enables the researcher to study and focus on all the aspects of the phenomenon that is investigated. The candidate used concurrent triangulation, as qualitative and quantitative data collection methods were utilised at the same time during the research process. The candidate adapted the diagram from Creswell (2003, p. 214) in Figure 4.1 to demonstrate how she used concurrent triangulation.

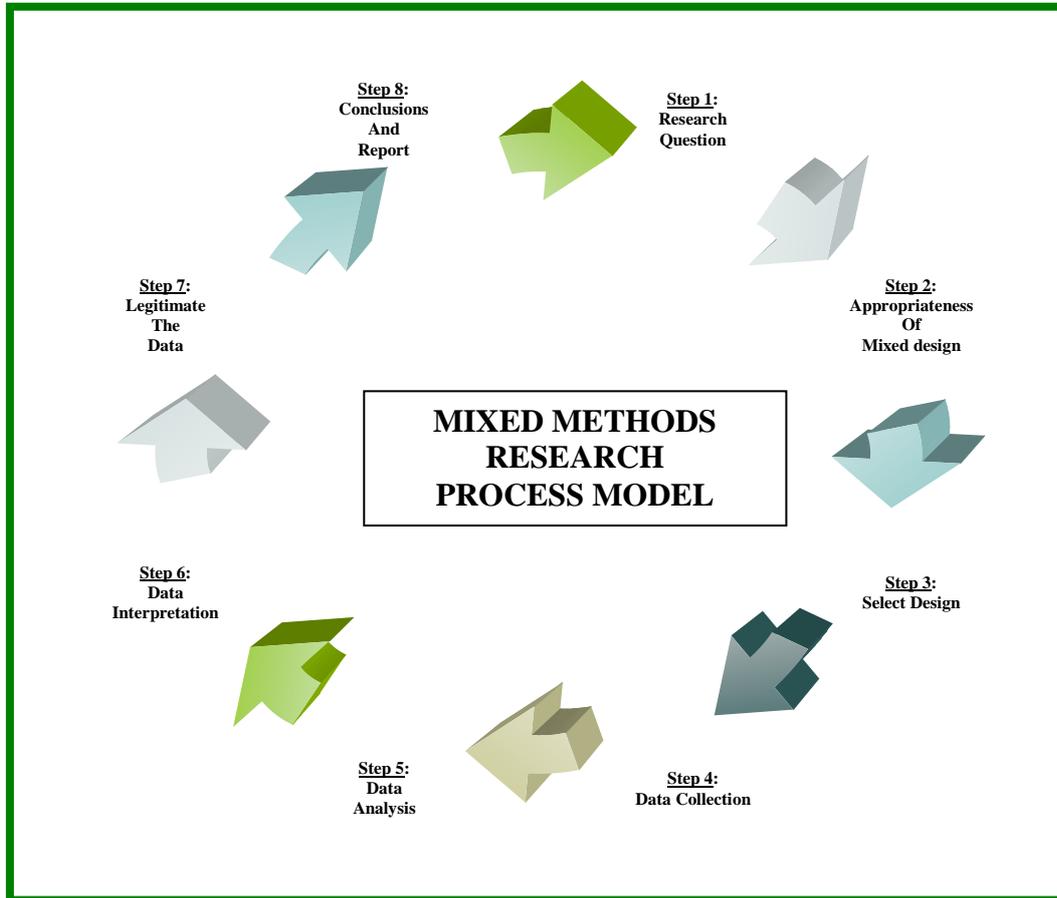
Leahey (2005) points out that there are several benefits in utilising mixed-methods research, such as enhanced confidence in the results, and validity and reliability. Greene and Hogan (2005) however warn that researchers must still be cautious in selecting methods, and should have a clear rationale for using a certain method. The candidate is of the opinion that the use of a mixed-methods approach in this study may also shed light on different aspects or dimensions of the usefulness of EMI, which would not be possible when using just one of the data collection methods.



**Figure 4.1: Concurrent Triangulation Strategy**

Johnson and Onwuegbuzie (2004, p. 21) developed a Mixed Methods Research Process Model that consists of eight steps. These steps have similarities with traditional research methods but also have distinct differences. These steps were followed conducting this study. They are (1) determining the research question; (2) determining the appropriateness of a mixed methods design; (3) selecting a mixed methods design; (4) data collection; (5) data analysis; (6) data

interpretation; (7) legitimising the data; and (8) drawing a conclusion and writing the report. Step 7 involves that the researcher must determine whether the data from the different approaches, as well as the interpretations, are trustworthy. Figure 4.2 visually portrays the different steps that the candidate followed in regard to the Methods Research Process Model.



**Figure 4.2: The Mixed Methods Research Process Model (Johnson & Onwuegbuzie, 2004)**

The candidate utilised the one-group pretest-posttest design for conducting her study. This design is basic as it has only one group (an experimental group), with single measurements before and after the intervention (Bless & Achola, 2000; Neuman, 2000). The intervention comprised of one session of EMI, which was believed to be sufficient to produce a measurable change in trauma symptoms. The prescribed structure of EMI was followed and the length of the session was between sixty to ninety minutes. The details of the EMI session will be addressed later in this chapter.

### 4.3 DATA GATHERING INSTRUMENTS

Owing the mixed-methods approach to this study, both quantitative and qualitative instruments were used to collect data.

### **4.3.1 QUANTITATIVE INSTRUMENT**

#### **4.3.1.1 TRAUMA SYMPTOM CHECKLIST FOR CHILDREN (TSCC)**

The TSCC is a 54-item self-report scale and was developed by John Briere in 1996. The scale can be used with both boys and girls in the age range of 8-16 years, with normative adjustments for 17 year olds. Responses are rated on a four point scale, from zero (never) to three (almost all the time) (Briere, 1996). The TSCC was conducted right before the EMI session and then again two weeks after the therapy.

Most measures for childhood trauma focus on specific types of trauma or specific trauma-related symptoms, for example the Child PTSD Symptom Scale, the Children's Depression Inventory, or the Sexual Abuse Fear Evaluation (Nilsson et al., 2008). A recent survey conducted in the United States found that the TSCC is the most frequently used instrument to determine the presence and intensity of trauma symptoms of children and adolescents (Elhai, Gray, Kashdan & Franlin, 2005). It is described as a rapid and easily administered instrument, which is useful for different types of research (Balaban, 2006).

The candidate decided to use the TSCC as quantitative tool, as it is a broad-based self-report questionnaire. It has both abuse specific (e.g. sexual concerns, dissociation and PTS), and generic (e.g. depression, anxiety and anger) subscales. The respondents in this study experienced different types of traumatic experiences and presented with different symptom profiles. Briere (1996) points out that the TSCC is the only instrument measuring trauma symptoms of children that has an under response and hyper response subscale. According to Briere children occasionally have the tendency to indiscriminately mark the highest or lowest frequency on checklists. The hyper and under response scales evaluate these tendencies. The TSCC is also easy and quick to administer, and is therefore an ideal tool for the purpose of this study. The first TSCC took approximately fifteen to twenty minutes to complete, whereas the second one was completed in ten to fifteen minutes.

#### **4.3.1.2 RELIABILITY AND VALIDITY OF THE QUANTITATIVE INSTRUMENT**

McLeod (2003) points out that doing quantitative research without a valid and reliable instrument is useless. The TSCC is standardised in both clinical and non-clinical populations (Nilsson et al., 2008) on a large sample of 3,008 racially and socioeconomically diverse children (Briere, 1996). The TSCC has however not been standardised for the South African population.

##### Validity

Researchers must always ask themselves if they are measuring what they intend to measure when conducting research. This refers to the validity of a data collection tool. Gray et al. (2007, p. 12) define validity as "the fit between the concept that a researcher wants to examine and the

evidence for that concept". It can therefore be said that validity refers to the effectiveness and accuracy of the instrument to measure what it claims to measure.

Sadowski and Friedrich (2000) examined the reliability and different dimensions of validity of the TSCC with 119 psychiatric hospitalised adolescents. According to their findings, the TSCC is a valid instrument to determine levels of distress in a psychiatric sample. Several studies proved the construct validity of the scale. Singer, Angling, Song and Lunghofer (1995) as part of the normative sample, conducted a survey with a sample of 3735 children between the ages of 14-19. The relationship between exposure to violence and the TSCC scores were examined. They found a correlation between the exposure to different forms of violence and significant variance in the TSCC scores. Elliot and Briere (1994) also did a study with a sample of 399 sexually abused children. The scores of all the subscales were higher in sexually abused boys and girls than in those without a sexual abuse history. It was further found that the children who disclosed abuse, had a higher score in all the scales of the TSCC, than the children who denied abuse. The study done by Nilsson et al. (2008) with a sample of 728 investigated the construct validity of the TSCC by means of a confirmatory factor analysis, and found that their results were in close agreement with the results found in the normative study. Their sample consisted of a normal and a clinical group.

The convergent validity of the TSCC has also been tested in several studies and these studies indicated that the TSCC co-varies with other instruments in expected ways. In the study done by Lanktree and Briere (1995) the Child Depression Inventory (CDI) correlated best with the depression scale of the TSCC. Evans et al. (cited in Briere, 1996) correlated the scores from the TSCC with the Revised Children's Manifest Anxiety Scale (RCMAS) in their substudy, and found that the RCMAS correlated best with the anxiety and depression subscales of the TSCC. Sadowski and Friedrich (2000) correlated the TSCC with different scales from the Beck Depression Inventory (BDI), Symptom Checklist-90-Revised (SCL-90-R), Adolescent-Dissociative Experience Scale, Minnesota Multiphasic Personality Inventory (MMPI), Rorschach, and the Family Environment Scale. Analysis suggested that the subscales of the TSCC were reliable and intercorrelated.

### Reliability

Royce (2008, p. 101) states that reliability "is concerned with the ability to repeat or reproduce the measurements or observations that are made during a study". In other words, reliability refers to the ability of the tool to produce the same results when conducted repeatedly in the absence of intervention.

Internal consistency is one way to determine the reliability of a quantitative tool. There are several measures of internal consistency, but Cronbach's coefficient alpha is the most common estimate (Terre Blanche & Durrheim, 2006). An alpha value of greater than .75 is considered reliable (ibid.). The reliability as measured in the normative study of the TSCC (Briere, 1996) demonstrated a high internal consistency for five of the six scales. The Cronbach alphas range from .82 to .89. The

sexual concerns scale proved to be moderately reliable (.77). Nilsson et al. (2008) found in their study that the total internal consistency of the total scale was .94 for both the clinical and normal group. The Cronbach alphas varied between .78 and .85 for the normal group and between .74 and .89 for the clinical group. The study of Sadowski and Friedrich (2000) also indicated an adequate reliability on the Cronbach's alpha.

Test-retest reliability is used to determine a instrument's reliability over time. Terre Blanche and Durrheim (2006) point out that the general rule of thumb is that a test is reliable if the reliability coefficient is greater than .80. It is however important to take into consideration that this is not a hard and fast rule, and can differ. Nilsson et al. (2008) obtained test-retest correlation coefficients between .67 and .81, which is relatively good. Lanktree and Briere (1995) did a repeated measurement study on therapeutic outcomes of 105 sexually abused children. The study was done over a time period of four years with a measurement interval of three and six months. According to their findings, there was an overall decrease of trauma symptoms. By using the TSCC, the researchers were able to determine different variables, for example a decrease in symptoms of sexual concern after a formal case was made at the police. However, the correlation coefficient was not determined.

It therefore seems that the TSCC is a valid and reliable quantitative instrument in measuring emotional distress and trauma symptoms. This makes the TSCC a favourable method of data collection in this study.

## **4.3.2 QUALITATIVE INSTRUMENTS**

### **4.3.2.1 SEMI-STRUCTURED INTERVIEW**

The candidate decided to interview the parents/care workers of the participants as part of the data gathering. The reason for this was to gather the observations of the parents/care workers concerning the usefulness of EMI. Terre Blanche and Durrheim (2006) caution that there are different kind of interviews and that interviewers must first determine what kind of interview they want to conduct. For the purpose of this study, the candidate decided on a semi-structured interview. According to Barbour (2008, p. 119) the semi-structured component of the interview is crucial as "it refers to the capacity of interviews to elicit data and perspectives of salience to respondents rather than the researcher dictating the direction of the encounter, as would be the case with more structured approaches." It thus gives the researcher and the participants the possibility to be flexible (De Vos, 2005).

A semi-structured interview was conducted with each of the participants' care workers two weeks after the intervention. It was conducted on the same day as the second TSCC. When conducting a semi-structured interview, the interviewer develops an interviewing schedule to guide her/him through the interview. This schedule consists of broad predetermined topics/questions, with sub-topics/questions if needed (De Vos, 2005), that can be asked in a structured or unstructured

manner (Gray et al., 2007). The interviewing schedule that was used in this research study mirrored the six subscales measured by the TSCC, namely anxiety, depression, dissociation, sexual concerns, PTS, and anger. Probes were also included to clarify the main topics for the parents/care workers. The schedule was developed by the candidate personally in order to triangulate with the TSCC (see Annexure C).

#### **4.3.2.2 JOURNAL ENTRIES**

Journal writing is an old method of reporting information and pinning down thoughts. In history, diaries were used to write up hopes and dreams, visions and truths about gods, day-to-day living and special historical events. It has also been a valuable therapeutic tool, used by psychologist from the earliest times of this discipline. Journal writing, also referred to as reflective writing (Maarof, 2007), is progressively seen as a qualitative data collection tool and regarded as central to research methodology (Jasper, 2005).

Bond (2001) perceives reflective writing as a way that researchers turn their experience (i.e. the experience of conducting the EMI) into learning. Maarof (2007) agrees and refers to journals as a window to the research experience. Journal writing in this research study was utilised when the EMI sessions were conducted. The candidate wrote a journal in the first person, encompassing her observations, speculations, possible shortcomings and advantages (Annexure D). She also noted possible alternatives to utilise with next participants. Jasper (2005) summarizes that journal writing reflects the candidate's vision and stance.

#### **4.3.2.3 TRUSTWORTHINESS AND CREDIBILITY OF QUALITATIVE INSTRUMENTS**

Neuman (2000) is of the opinion that qualitative researchers consider the terms reliability and validity, but do not pertinently refer to it, as they associate them with quantitative research. Qualitative researchers would rather refer to strategies of determining trustworthiness and credibility. Royse (2008) indicates that trustworthiness and credibility can be determined by different efforts made by the researcher. The candidate made use of most of these efforts, which are indicated below:

- **Prolonged engagement** – where the researcher spends enough time to get to know the participants and the theme that is studied. The candidate worked as a social worker with children in various settings for the past twelve years. She is trained in EMI and has attended workshops and training on the topic. She also had numerous formal and informal discussions with experts in the field of EMI.
- **Persistent observation** – to observe the phenomenon and make notes. The candidate observed an expert doing EMI and made extensive notes. She also watched the video recordings of the study several times to make sure that all the important and relevant information has been included. Referring specifically to the journal entries, Jasper (2007) is of

the opinion that journal writing enhances the reliability of the research, as by means of reflective writing, the researcher acknowledges his/her central involvement in the study. The candidate was able to reflect on the trauma of and EMI processes with the participants.

- **Triangulation** – This is when multiple sources of information, methods or observers are used to cross-validate data. This study used a mixed method approach and therefore data gathered from the TSCC's and the interviews could be crosschecked. The candidate also made recordings of the interviews to help her to test the credibility and trustworthiness of her interviews.
- **Leaving an audit trail** – this is necessary so that others can confirm the findings of this study. All the raw data, along with the audio and video material are stored together in a container and safely kept in the candidate's office.

The abovementioned information demonstrates that the candidate made an effort to ensure that the data she received from her qualitative research tools were trustworthy and credible.

#### **4.4 STUDY POPULATION AND SAMPLING**

Gray et al. (2007, p. 103) refer to the study population as "all the possible cases of interest". It can therefore be described as the total set of people with the same characteristics from which the researcher will draw his/her sample. A sample can be described as the elements or portion that is a representative of the population (Onwuegbuzie & Collins, 2007). Royse (2008) uses the metaphor of a cup of coffee to clarify the difference between a population and sampling. The author notes that only a sip from a cup of coffee is needed to determine whether it is too strong or not. There is no need to empty the entire content. Thus the entire cup of coffee is the population, while the sip is the sample. The population for this study is defined as children in the age range of 14 to 16 years, living in Gauteng, who have experienced trauma and who present with current symptoms of trauma that have been present for at least four weeks prior to the baseline data collection.

Using quota sampling, the candidate conveniently selected the participants from her private practice and from the Abraham Kriel Care Centre, Langlaagte. Royse (2008) clarifies that this sampling method is used when the researcher has knowledge of certain characteristics of the population. A two-by-two sample frame was used to select 12 children: three African males, three White males, three African females and three White females. The sample size is sufficient for the exploratory nature of this study (Onwuegbuzie & Collins, 2007). The sample frame will ensure the diversity of the sample.

## 4.5 THE PILOT STUDY

A pilot study was conducted prior to the data gathering. Royse (2008) emphasizes that it is important for the researcher to pre-test the procedures and instruments used in a particular study. Both the TSCC and the interviewing schedule were tested with one person each who did not form part of the sample used by the candidate. The results suggested that the TSCC was a reliable method of data collection and that the interviewing schedule seemed to elicit the appropriate data.

## 4.6 DEFINING THE INTERVENTION: THE TYPICAL EMI SESSION

Since this study centres on the exploration of the usefulness of EMI, it is necessary to provide detailed information about how the EMI was implemented. The EMI session is the independent variable in this study, around which the changes to the TSCC were measured, the feedback from the children's caregivers was elicited and the journal entries were maintained.

### 4.6.1 SETTING UP A SESSION

#### 4.6.1.1 PREPARATION OF THE CANDIDATE

Under normal therapeutic conditions, the candidate would use the first session for a clinical interview. EMI will follow either in the next session, or even later in the therapeutic process. In the research setting however, it was important to eliminate the therapeutic value of any possible individual encounter, in order to isolate the usefulness of EMI. Therefore, the EMI session for this study was set up as illustrated in Figure 4.3.

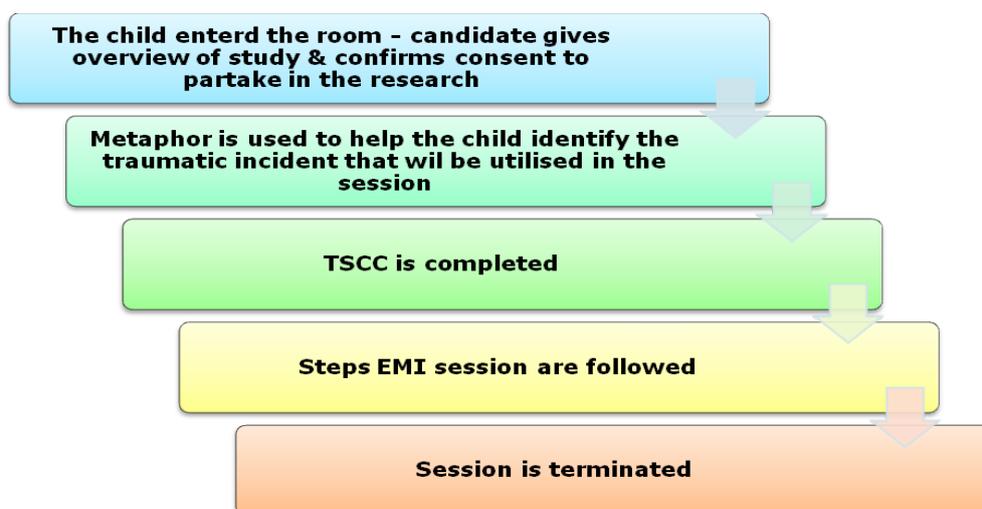


Figure 4.3: The structure of the EMI session during the study

The appropriate chairs were chosen and the candidate made sure that the children would not experience any physical discomfort in regards to the therapy room. It was for example a very cold office and the candidate arranged for a heater. Thereafter the specific steps for an EMI session were followed.

The chairs were arranged as prescribed by Beaulieu (2004), slightly offset to the child's right side, ensuring that they are not face to face (see figure 4.4). This will ensure that the client focuses on the candidate's hand and helps the candidate to cover the child's entire range. The candidate ensured that she was dressed in sombre colours without excessive patterns.



*Figure 4.4: Seating position for conducting EMI (Beaulieu, 2004, p. 160)*

#### **4.6.1.2 PREPARING THE CLIENT: IMPACTFUL TECHNIQUES**

It is essential that the child is prepared for the technique before it is conducted. Beaulieu (2004) presents different analogies that can be used for the preparation. The candidate used two different metaphors to explain the EMI process. The first one is to explain that EMI can be described by means of chlorine and water. If you drink concentrated chlorine, you will surely become very sick and may even die. Chlorine is however harmless when diluted in a swimming pool. EMI works the same, the trauma will always be part of your life, but it will not be poisoning any more.

Another analogy that the candidate used is to write the number 3 with a pen on a paper. The candidate then explained to the client that memory is like the number "3" on this paper, we cannot erase it, as it is written in ink, but we can add to it, and can turn it in a number "8". The reactivation of the memory will help to add information to the memory that will help the client. The "3" will, however still be there, but when the client gets a trigger, the "3" will not be surfacing any more, but the "8" will take its place (Beaulieu, 2004, p. 166).

#### 4.6.1.3 ESTABLISHING THE VERBAL CUES

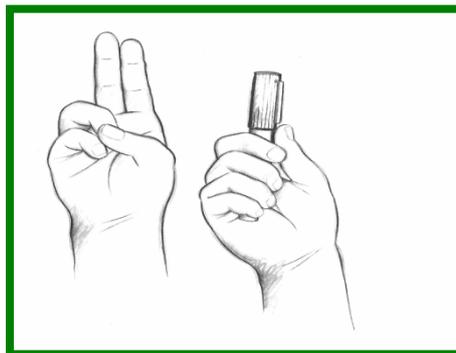
The challenge for the social worker lies in the identification of the principle knot. This is the part of the event(s) that the child found the most traumatic. An important essential for the success of the therapy is to keep the client in touch with the traumatic memory and to open new information and sensations. Key words or phrases are thus selected to help the client to stay in touch with the event. Beaulieu (2004, p. 237) states the following: "The key words or phrases are selected with the client, and become, in effect, the 'title' of the box containing the problem, leaving the client free to explore the box and its content, inside and out." The candidate used the words, "Imagine we have to write a title for your traumatic event, like in the magazines. What words would we use that will take you right back to that day/incident?"

The next step is to determine the visual "hot spots". The social worker does this by moving the open hand over the visual range (like washing a window) while repeating the verbal cues. The hot spots are the areas in the visual range that represent the least and most discomfort. The area or quadrant that is the most comfortable for the client can be identified as the resource zone and the therapist can utilise this zone if it is needed to comfort the client.

Another important facet of EMI is to do scaling in order to measure the progress that has been made. The following method was used to do the scaling: "Let's pretend we draw a line on the floor, the one end marked '0', representing that this incident does not bother you at all, and the other end is marked '10', representing feelings of deep distress. Where would you put yourself?" Hartman (2008c) refers to the scaling process as "downloads" and recommends not to do it more than twice during the session, otherwise the client may feel that they must "perform".

#### 4.6.1.4 DETERMINING THE VISUAL RANGE, SPEED, DISTANCE AND TOOL

After the key words or verbal cues are chosen, the candidate determines the visual range of the client, as well as the speed of the eye movements. A focal point is also created, either by holding a brightly coloured object (like a fluorescent marker) or by the index and middle fingers (see figure 4.5). Beaulieu's (2007) observation that some people who have been sexually abused do not like the fingers to be the marker of the focal point, was also evident during this study.



*Figure 4.5: Focal point – the two fingers or alternatively a bright marker (Beaulieu, 2004, p. 162)*

## **4.6.2 CONDUCTING A SESSION**

### **4.6.2.1 THE EYE MOVEMENT PATTERNS**

There are 22 eye movements in EMI (Annexure E) used to facilitate access of traumatic material in different sensory modalities. The patterns cover at least two quadrants in the visual field, for example from the top left corner to the top right corner. Some children dissociate and it is therefore important for the social worker to evaluate when the dissociation is taking place.

There is a certain protocol concerning the number, duration and rhythm of the movements. It is recommended for the social worker to complete the movements from 'A' to 'F' in its correct order. Thereafter the social worker can randomly choose the movements that s/he wants to repeat (Hartman, 2008c). The movements need to be repeated five to ten times, but Beaulieu (2004, p. 230) mentions that there is no predetermined "dosage", and the therapists must use their own discretion.

Segments F, G and H are the integration movements and must be used only after the client has experienced relief in all the quadrants. Beaulieu (2007) states that it is not necessary to do both G and H with every client.

### **4.6.2.2 BETWEEN THE MOVEMENTS**

During the eye movements, therapists can gather information of the child's experience. When EMI was first applied, little attention was given to the verbalisation of the client's experience during the eye movements (Beaulieu, 2004). It was however noted that these clients had recurrent symptoms several months after the treatment. Beaulieu (2004, p. 244) identified the importance for the client to verbalise her/his experience, by stating, "Words do have power, and by letting the client express her/his experience we release that power".

Information elicited from modalities must be explored. The memory of any event or situation is encoded and stored in all the senses to some extent. The social worker would therefore ask, "Did you see any pictures? Or maybe smell or hear anything?" The candidate found that it is very important to be fine-tuned into the facial expression and body language of the client. For example, girl who can hear the screaming of a person may turn her head or cover her ears. The therapist can use this as a cue to explore that specific modality. It is important however to keep in mind that EMI is not so much a psychotherapy than it is a neuro-therapy. Therefore, the therapist must refrain from spending too much time on elicitation of information.

### 4.6.3 CLOSING A SESSION

After the integration, the therapist can spend time on answering questions and explaining what to expect after the session. According to Beaulieu (2007) the integration continues for the next days, weeks and even months after the session, therefore EMI sessions should be scheduled fortnightly. She uses the metaphor of baked custard to explain the process (Beaulieu, 2004), by mentioning that when custard comes out of the oven it is set, but still fragile and may separate if not handled with care. The residual heat however helps the dish to set firmly even if the heat is less intense than it was in the oven. Beaulieu (2007) notes that the integration process in children is more rapid than in adults, and therefore sessions can be conducted weekly. The candidate however decided to let two weeks elapse before commencing the final TSCC in order to allow time for appropriate trauma integration. The social worker must also prepare the child that he/she may experience some physical symptoms like headaches and nausea. Hartman (2006) points out that the therapist must leave enough time in a session to close the session effectively and must make sure that the client is stable when leaving the office.

In conclusion, the EMI process has a specific framework in which the social worker must work. Therefore, in order to conduct it successfully, therapists must be appropriately trained.

### 4.8. DATA ANALYSIS

Data analysis is the process that the researcher uses to bring “order, structure and meaning to the mass of collected data” (De Vos, 2005, p. 333). Multi-method data analysis was used to enhance the significant findings of this study. A parallel mixed analysis was conducted. Onwuegbuzie and Leech (2004, p. 779) mention that such a study must meet three conditions namely, (a) both sets of analyses must occur separately (b) the types of analysis must not build on each other and, (c) the results from the analyses are not compared until both qualitative and quantitative analyses are completed. Figure 4.6 illustrates how the data were analysed and subsequently triangulated.

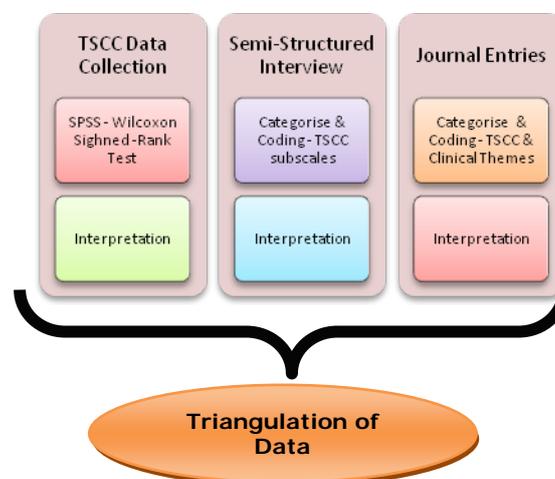


Figure 4.6: The steps followed in the parallel mixed analysis process.

#### 4.8.1 QUANTITATIVE DATA ANALYSIS

The Statistical Package for Social Science (SPSS) was utilised to capture the data of this study. This system is a user-friendly, flexible and comprehensive data management tool (Singh, 2007). Non-parametric statistics were used, because the study has a small sample size and the sample was not drawn from a normally distributed population. Specifically, the Wilcoxon Signed-Rank Test was selected. With this test the differences between two paired groups are calculated and the results are presented in regards to the size of the differences, as well as positive or negative ranks (Bless & Kathuria, 2004; Cohen & Lea, 2004; Pett, 1997).

According to Pett (1997, p. 115) The Wilcoxon Signed-Rank Test has certain assumptions. This study measured up to these assumptions in the following ways:

- *“The data is paired observations from a single randomly selected sample, constructed either through matched pairs or through utilizing subjects as their own controls”.* This study observed the differences of trauma symptoms pre-intervention and post-intervention of the same sample of children. The children thus formed their own controls.
- *“The data to be analyzed must be continuous and at least ordinal in level of measurement, both within and between pairs of observations”.* The data of this study is ordinal, as it is ranked by magnitude (De Vos, 2005). Items on the TSCC are rated on a four point scale, from zero (never) to three (almost all the time), but summated to yield short scales that range from 0 to 3 (Briere, 1996).

It is therefore clear that the Wilcoxon Signed-Rank Test was an appropriate choice for analysing the quantitative data of this study.

#### 4.8.2 QUALITATIVE DATA ANALYSIS

There are a number of techniques for social workers to analyse their qualitative data. The candidate used content analysis for this specific study, to analyse the data from both the interview and the journal entries. Berg (2004, p. 269) describes content analysis as “a passport to listening to the words of the text and understanding better the perspective(s) of the producer of these words”.

Ezzy (2002) highlights that content analysis begins with categories that are defined by the researcher. The categories for the interview were identified when compiling the interviewing schedule. As the candidate utilised a multi-method approach, the categories identified were the same as the subscales of the TSCC. The qualitative data was then transformed into codes, which ranged from 0 (never) to severely (3). Moran-Ellis (cited in Barbour, 2008) cautions that researchers must be careful not to reduce qualitative data into broad categories, as this seems like an attempt to transform one type of data (qualitative) into another type (quantitative). Onwuegbuzie and Leech (2004) however highlights that the most common way to supplement

qualitative analysis is by quantifying the data. This entails that the qualitative themes are numerically represented. This ensures consistency in the results, which in return enhances the trustworthiness and the credibility of the data.

The journal entries were also analysed according to the same categories as the interviews, as some of the children reported their experiences to the candidate. These in turn were entered in the diary. Other themes were also identified from the journal entries, which were more focused on the EMI process itself. Therefore the individual entries were separately coded within those particular themes. These themes will be discussed in more detail in chapter 5.

## **4.9 SUMMARY**

The preceding discussion on the research methodology provides a clear and thorough framework for the data collection, analysis and processing. A one-group pretest-posttest design was used. One sample group was used, consisting of 12 children who experienced trauma more than four weeks prior the study, and have trauma symptoms. They are in the age range of 14 to 16 years and comprise both males and females. The study is exploratory by nature and a mixed methods approach was used. This entails that both qualitative and quantitative data gathering instruments were employed at the same time, with equal importance. This process is called concurrent triangulation. The candidate applied the Trauma Symptom Checklist for Children, semi-structured interviews and journal entries as tools. The reliability and validity of the instruments were also discussed.

The steps of the EMI process were also discussed in this chapter, concerning the preparation for a session, conducting the movement sequences and closing the session. The framework for data analysis was reviewed. The next important phase in the research process is the interpretation of the data. Therefore the analysis and subsequent interpretation of the results will be discussed in detail in the next chapter.

# CHAPTER 5

## RESULTS AND DISCUSSION

### 5.1. INTRODUCTION

This chapter will focus on the process of data analysis, the interpretation of the data, and subsequent conclusions about the results. De Vos (2006, p.339) describes the data analysis phase as “the process of bringing order, structure and meaning to the mass of collected data”. Royse (2008, p. 318) emphasize that this is an exciting stage for the researcher, as the data that have been collected are starting to “come alive”. Data analysis is therefore the process that enables the researcher to come to a possible answer to the research question and to produce a better understanding of the phenomenon that has been studied. As mentioned in Chapter 4, the candidate adopted a parallel mixed analysis for her study.

The quantitative data was logged into SPSS and the results were printed out. During the same timeframe, the candidate did the content analysis for the qualitative data and logged it into the different categories. It may be important to consider the fact that the subscales of the quantitative data, namely the TSCC, guided the categories of the qualitative data. Thereafter the data of both methods were compared.

The data retrieved from the TSCC will be compared and reported in relation to the data retrieved from the journal and the interview. The candidate triangulated and reported extensively on the process of triangulation in Chapters 1 and 4. The process of triangulation serves to strengthen the findings, as well as to provide a logical synthesis between the different sets of data. Subsequently the data will be discussed in terms of the main categories as provided by the TSCC. These categories will be presented in the form of a condensed table and a graph, whereafter each category will be discussed in terms of the qualitative and quantitative data. The last part of this chapter will consist of a discussion of alternative data as retrieved from the journal entries, which do not fall in the abovementioned categories.

### 5.2 CHALLENGES CONCERNING THE RESPONDENTS

Twelve children took part in the study, namely three African males, three White males, three African females and three White females. The respondents were in the age range 14 to 16 years. All the respondents were in the Abraham Kriel Care Centre, Langlaagte.

Respondent 9 did not complete the EMI session, but completed the second TSCC. This child accessed trauma material during the session that she dissociated from since her stepfather sexually abused her. She found this uncomfortable and wished not to complete the treatment. The candidate immediately stopped the eye movements and calmed her down by doing relaxation exercises, using guided imagery. The venue was also changed by using one of the social workers' offices instead of the therapy room, as the respondent verbalised that she wanted to leave the room. Her care worker was called in and informed about the situation (with the participant's consent). The candidate throughout the following two weeks monitored the respondent by visiting her and contacting her care worker as well as the head of the care centre. It is important to note that since then, this respondent decided to complete her EMI treatment and it is therefore planned that this respondent will consult with the candidate on a regular basis.

Respondent 8 was not able to follow the eye movements effectively. This child is on Ritalin, medication specifically prescribed for Attention/Deficit Hyperactivity Disorder (ADHD). According to Beaulieu (2004), children who have ADHD do sometimes have eye movement deficit. Beaulieu (personal communication, August 31, 2008) mentions that Ritalin usually addresses the eye movement deficit, but she speculates that this child was probably not stabilised in terms of his medication, when the data were collected. In effect, no EMI took place with this child, as he could not follow the eye movements.

Therefore, two of the respondents did not receive the full benefit of EMI, but the data nevertheless contribute to a better understanding of the usefulness of this treatment as a trauma intervention strategy.

As previously mentioned, the clinical scales of the TSCC were used as categories for data analysis. These categories are:

- Anxiety;
- Depression;
- Posttraumatic Stress;
- Anger;
- Dissociation (Over and Fantasy); and
- Sexual Concerns (Distress and Preoccupation).

Subsequently the results of the qualitative and quantitative data will be presented by means of the abovementioned categories.

### **5.3 EFFECTIVENESS OF EMI**

In order to assess if there has been significant change in the data, the Wilcoxon Signed-Ranks test was used. Pett (1997) informs that this test is used when the difference between equally paired data is calculated and the results are subsequently reported on. Bless and Kathuria (2004) point out that another significant trademark of this test is that the positive or negative direction of the

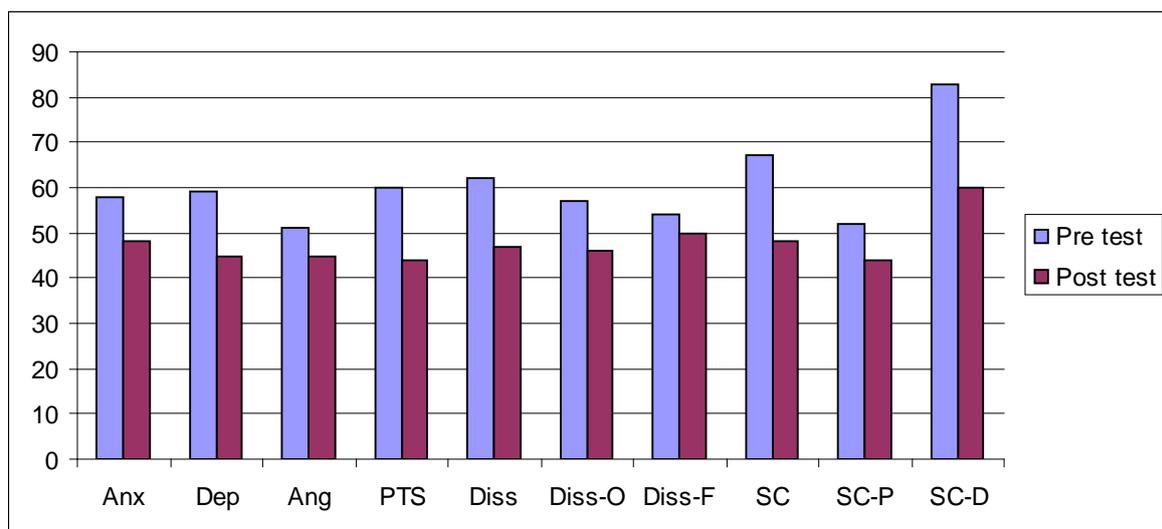
data can be determined and that the extent of the difference between the two pairs can be recorded. For the purpose of this study, the difference between the pre-test TSCC and the posttest TSCC was calculated, and the ranks were determined. The results of the data are presented in Table 5.1.

Variable	Pre-test Median	Post-test Median	Negative Ranks	Z	p (1-tailed)
Anxiety	58	48	11	-2.83	.003*
Depression	59	45	11	-2.99	.002*
Anger	51	45	9	-1.38	.084
PTS	60	44	12	-3.07	.001*
Diss	62	47	10	-2.23	.013*
Diss-O	57	46	10	-1.96	.025*
Diss-F	54	50	9	-2.06	.023*
SC	67	48	9	-2.58	.005*
SC-P	52	44	8	-1.60	.055
SC-D	83	60	7	-2.37	.009*

**Table 5.1: Pre-test and post-test median scores, as well as the negative ranks, Z-scores and one-tailed significance for anxiety, depression, anger, posttraumatic stress, dissociation (overt and fantasy), and sexual concerns (preoccupation and distress).**

\* Significant differences (at  $p < .05$ ) are marked with an asterisk.

According to these findings, there has been a decrease in all the median scores, in other words, a reduction in trauma symptoms. Furthermore, it can be seen that eight of the ten variables showed differences between pre-test and post-test that were significant at  $p < .05$ . Figure 5.1 illustrates the reduction in the specific categories.



**Figure 5.1: Decrease of the pre-test and post-test median scores of the clinical scales before and after the EMI session**

### **5.3.1 ANXIETY**

According to the Wilcoxon signed ranks test, the median anxiety levels of the 12 children decreased significantly from the pre-test ( $Md=58$ ) to post-test ( $Md=48$ ) ( $p=0.003$ ). The negative ranks of the Wilcoxon test confirm that 11 of the 12 children experienced a reduction in their anxiety levels.

During the interviews, six of the care workers indicated a reduction of anxiety levels of the six children in their houses. Two of the children's anxiety levels were described as the same as before the treatment and two of the children were described as not being anxious either before or after the treatment.

Respondent 12 indicated to the candidate that she does not feel as scared as prior to the treatment, while Respondent 2 reported that her sleeping patterns have improved. Respondent 3 experienced extreme anxiety prior to the EMI. Her care worker described her as "troublesome" and always anticipated that something bad might happen. Respondent 3 reported during the session that she had mild chest pains. After the session, she also reported a mild headache, which subsided the next day. According to Beaulieu (2004), this is a normal reaction after EMI. Respondent 3 reported significant relief of the anxious feelings the day after the treatment. She came to see the candidate personally and described that she felt an inexplicable feeling of "lightness" and relief.

### **5.3.2 DEPRESSION**

Significant decrease was also measured in regards to the median depression levels of the children, from the pre-test ( $Md=59$ ) to post-test ( $Md=45$ ) ( $p=0.002$ ). According to the interviewing data, a decrease of 8 of the 12 children was reported in regards to their depression.

Before EMI, Respondent 10 presented with symptoms of sleeplessness and withdrew from the other people living in the house. He would wander through the house during the night. This woke up his care worker. He also isolated himself in his room. Since the therapy however, he started talking about his trauma with his care worker and slept through the night. The care worker described respondent 2 as being mildly depressed before the EMI session. Apparently, she would complain that she was unable to do anything right, and that she did not have any friends, which was evidently not the case. After the treatment, the care worker found that this respondent was more motivated and was even talking about her future.

Respondent 3 had crying spells before the EMI. Her typical behaviour pattern during previous therapeutic interventions was that she would start to cry almost immediately after she entered the room, and would cry throughout the whole session, not uttering one word. When she was confronted with her trauma, she had the tendency to leave the therapy room and would not return until the next session. According to her care worker, she did not cry since the EMI. Before the EMI,

Respondent 3 also had the tendency to resort to self-mutilating behaviour when she was depressed or anxious. She did, however cut herself on the arms during the two-week period after the session, when her mother phoned and upset her.

### **5.3.3 ANGER**

Although there has been a reduction in the median anger levels of 9 of the children, the decrease is not significant from pre-test ( $Md=51$ ) to post-test ( $Md=45$ ) ( $p=0.084$ ).

Different explanations can be offered for this measurement. Respondent 8 (who was possibly not stabilised on his medication) had an extreme anger outburst on the day he completed the second TSCC. His anger was related to an incident that happened at school. It is also important to mention that, in effect, because of the fact that he had eye movement deficit, EMI did not take place, and therefore no improvements could be expected. On the morning that Respondent 10 completed the second TSCC, somebody stole his I-pod, therefore an elevation of his anger level is expected.

Both Respondents 1 and 7 had anger outbursts before the EMI. According to their care workers, they did not present with any anger episodes after the EMI. Seven of the respondents were described as not being aggressive by nature and did not present with angry tendencies. They did not develop aggressive behaviour after the EMI, except for Respondent 10 whose I-pod was stolen.

Therefore, it seems that two possible conclusions can be made. Firstly, that EMI is not useful in resolving the anger symptoms. Secondly, that the TSCC is not as a reliable measurement instrument in distinguishing between anger related to the trauma, and anger related to a specific situation. As no previous studies were done in regard to these two possibilities, it could be recommended as a possible focus for further studies.

### **5.3.4 POSTTRAUMATIC STRESS (PTS)**

The results of the Wilcoxon signed ranks test indicated that the median posttraumatic symptoms scores reduced significantly in all 12 children that took part in the study, from pre-test ( $Md = 60$ ) to post-test ( $Md = 44$ ) ( $p = 0.001$ ).

Six care workers reported a reduction in symptoms, whereas four reported the symptoms as unchanged. It is also important to mention that three out of the four care workers were of the opinion that these children did not present with PTS symptoms before the treatment. The other respondent is number 8 who had eye movement deficit during the therapy. Two of the care workers indicated that they do not know the children well enough to comment on their PTS levels prior and after the EMI. None of the children had an increase of PTS symptoms.

Respondent 3, who reported having nightmares on a regular basis prior to EMI, mentioned to the candidate as well as the care worker that she had a nightmare the night after the treatment. According to herself and the care worker, this was the last time she had one since the EMI. She was also a child that never completed a therapeutic process before, as she avoided the traumatic material. She did however complete the EMI.

Respondent 12 described her flashbacks as “movies” in her head. Prior to EMI, she was also afraid to go to sleep because of vivid nightmares. Therefore, she would try to stay awake as long as possible and would sleep in the living room. After the treatment she slept in her own bed, although with the light on, as she is still afraid of the dark. She also reported experiencing less “movies” during the day, which helps her to cope with her schoolwork. Respondent 11 has refused to talk about her traumatic incident prior to the EMI. She also refused formal therapy in this regard. The EMI was the first intervention that she took part in, and after the treatment she discussed the traumatic incident with her care worker.

### **5.3.5 DISSOCIATION**

Looking at the median dissociation scores, there was also a significant decrease from pre-test ( $Md = 62$ ) to post-test ( $Md = 47$ ) ( $p = 0.013$ ). The dissociation clinical scale of the TSCC is divided in two subscales, namely overt dissociation (DIS-O) and fantasy (DIS-F). According to the Wilcoxon signed ranks test, both median scores decreased significantly. Overt dissociation decreased from pre-test ( $Md = 57$ ) to post-test ( $Md = 46$ ) ( $p = 0.025$ ) whereas fantasy decreased from pre-test ( $Md = 54$ ) to post-test ( $Md = 50$ ) ( $p = 0.023$ ). According to the findings, it seems that 10 out of the 12 children experienced a reduction in their overt symptoms, whereas 9 out of the 12 experienced a decrease in the fantasy subscale.

Many of the care workers found it difficult to report on the dissociation levels of the respondents. The candidate speculates that dissociation is an unfamiliar and difficult concept for some of the care workers. One care worker did indeed mention that she avoids excessive contact with Respondent 7, as she was scared of his strange behaviour. This child reported to the candidate prior to the EMI that he has a small man sitting on his shoulder. They are friends and he avoids contact with his peer group as they interfere with his fantasy play. Although he still reported a high level of daydreaming, after the EMI session there was a decrease in this regard, according to the TSCC. The child however reported to the candidate that he was still talking to the man on his shoulder after the treatment. It might be important to note that Respondent 7 will continue with EMI after the study.

It is also difficult to observe symptoms of dissociation if attention is divided between ten to twelve different children. Two of the care workers commented that they did not know the respondents well enough as they only recently moved to their houses. Respondent 12 reported that prior to the EMI she saw “dead people” and “ghosts”. The care worker reported that these sightings decreased

significantly, which also contributed to her improved sleeping patterns. She reported on seeing her dead grandmother only once after the EMI.

### **5.3.6 SEXUAL CONCERNS**

The Wilcoxon signed ranks test indicates a general decrease in the median sexual concern scores from pre-test ( $Md = 67$ ) to post-test ( $Md = 48$ ) ( $p = 0.005$ ). The sexual concerns scale is also divided in two subscales, namely sexual distress (SC-D) and sexual preoccupation (SC-P). According to the findings, there has been a 23 point reduction in the SC-D median scores of the pre-test ( $Md = 83$ ) to post-test ( $Md = 60$ ) ( $p = 0.009$ ). However, there has not been a statistically significant decrease in the SC-P median scores (pre-test –  $Md = 52$ ; post-test –  $Md = 44$ ;  $p = 0.055$ ).

Eight of the twelve children reported a decrease of SC-P levels on the TSCC. Three of the respondents are in a specialised house because they present with extreme sexual behaviour and preoccupation. According to the care workers, no sexual incidents concerning these children were reported since the therapy. Two of the three were moved to this house within the same time range of the study. This house however has strict rules. The children receive home schooling and are confined to the yard of the house. It is therefore unclear whether the decrease in the SC-P levels is due to the specialised house or because of the EMI.

Seven of the respondents reported a decrease in their SC-D level. Respondent 12 mentioned that she was still anxious when around boys, but according to her, she finds it less stressful to interact with them since the EMI session. The care worker however reported during the interview that prior to the EMI, she did not find the respondent overtly anxious in this regard. She has a healthy relationship with the care worker's husband and communicates with the boys in the house. She was however not able to comment on relationships outside the care centre environment. Respondent 2 is also in a specialised house for sexualised girls, as she presented with severe sexually preoccupied behaviour. To the knowledge of the personnel of the care centre, this was the first time that the respondent disclosed her alleged sexual abuse, following the EMI session. After the treatment, there was a decrease in both her SC-P and SC-D levels.

The candidate has a concern about the respondents' honesty on the SC scales, however. She is of the opinion that the respondents were too shy to be honest in their reporting of their sexual concerns. One respondent, for example, was involved in a sexual orgy at the care centre. On her TSCC, however, she reported that she never thinks about having sex. Different explanations can be offered for the reservation of the respondents about disclosing sexuality. It might be related to the fact that no therapeutic relationship was established before the EMI between the candidate and the respondents. Previous experience by the candidate when using the TSCC in practice showed no reservation if the child and the candidate had established a trusting relationship. It may also be possible that the children were scared that they could be in trouble after disclosing their true sexual concerns. Sexual preoccupation is a prominent concern for the care centre and the children may have felt that they would be judged if they were honest.

### **5.3.7 CONCLUSION**

In conclusion, it seems that EMI is a useful intervention strategy for addressing different trauma symptoms in children. According to the findings, it seems that there has been a significant reduction in the anxiety, depression, posttraumatic stress, sexual distress and dissociation levels of the respondents. It seems however that no significant decrease was found in the levels of anger and sexual preoccupation during the course of the study.

## **5.4 CLINICAL ISSUES RELATED TO EMI**

After appropriate analysis and triangulation of the qualitative and quantitative data, additional themes from the journal entries were identified, which need to be reported on.

### **5.4.1 THEME 1: CHALLENGES DURING THE EMI SESSIONS**

The candidate faced different challenges during the EMI sessions. Interestingly, Beaulieu (2004) also describes most of these challenges described below as forms of defence mechanisms of the client. According to the author, clients would fall back on the coping mechanisms that helped them cope since the traumatic experience took place. This would happen at the exact moment when the most intense part of the trauma information was accessed.

#### *Bodily experiences*

According to Beaulieu (2004), bodily experiences during EMI is a frequent defence mechanism for those clients whose other mediums of communication have been depleted, or whose cognitive processes are incapable of successfully sifting the overload of traumatic material they have experienced. Respondent 4 complained about feeling slightly nauseous during the session. Respondent 11 physically heard the murder victim screaming when the segments went into the bottom right quadrant. Both these respondents' physical symptoms subsided when the trauma information was integrated.

#### *Dissociation*

Nine out of the twelve children dissociated at some point during the session. Beaulieu (2004) notes that dissociation is a normal reaction to overwhelming traumatic material. The author notes that dissociation is usually evident during a session when the clients state that they do not see anything or are not in contact with any traumatic material. It is necessary for the therapist to be able to assess whether a client is not experiencing anything, or if he/she is dissociating. The therapist can for example ask the client, "Are you still at the scene of the murder?" and urge the client to stay in touch with the experience. Respondent 1 told the candidate that he actually does not think about the traumatic incident, regardless of his emotional discomfort during certain

segments. The discomfort was evident when he presented with uneven eye tracking. Respondent 9 told the candidate that she “was not there” anymore. Right after the candidate helped her to stay in touch with the experience, she accessed the dissociated material. Respondent 11 reported at some stage to the candidate that she did not feel or experience anything anymore. When encouraged to stay with the experience, she physically heard the murder victim screaming.

#### *Discontinuing of the session*

Beaulieu (2004) mentions that the tendency to discontinue therapy is one of the most common coping strategies of a client. Three of the respondents used this defence mechanism strategy at different stages of the session. Respondent 4 and 9 both verbalised that they preferred not to complete the session. Respondent 9 verbalised that she wanted to leave the room and the candidate immediately arranged to move the therapy to another office in order to end the session off in an appropriate manner (as described earlier in this chapter). Respondent 4 made an appointment with the candidate for later that day as she wanted to complete the therapy. This was the first time that she completed any therapeutic intervention relating to her trauma. The candidate is of the opinion that the EMI helped this respondent to alter her usual defence mechanism. Respondent 8 decided to discontinue the session after he completed the TSCC and before the EMI movements commenced. The candidate reassured him that he did not have to partake in the study. He however insisted to return after an hour to complete the session. The candidate speculates that this respondent was seeking control within the therapeutic situation, as he was powerless during the trauma. It must be noted that all three of these children refrained from any therapy before the EMI and therefore it is definitely their preferred choice of defence mechanism. Respondent 9 decided not to complete the therapy at that stage, but as mentioned previously, revised her decision after the data collection process was already completed.

#### *Uneven eye tracking*

Five of the respondents’ experienced uneven eye tracking when the segments led them through their “hotspots” (see 4.6.1.3 in Chapter 4). Beaulieu (2004) recommends that the therapist lead the client slowly through that quadrant with a few segments, in order to bring them in contact with the material that they try to avoid. In doing this, the therapist helps the client to overcome the trauma more effectively. Two of the respondents experienced general difficulty to follow the eye movements. The candidate had to remind them constantly to stay in contact with the experience and follow the fingers/pen. Respondent 8 was unable to follow the eye movements. He would for example look straight in front of him, when the candidate’s fingers were in the top left corner. He would insist that he was following the pen. Initially the candidate was also concerned about Respondent 5, as his left eye jumped continuously during the interview and TSCC. His eye however stopped jumping when the candidate started with the segments and did not jump during the completion of the second TSCC either.

Under normal therapeutic circumstances, it would be helpful for therapists to determine the client's coping mechanisms before conducting the EMI, so that they can anticipate the reaction of the client. Beaulieu (2004) suggests that therapists can assist the clients to develop effective coping skills before doing EMI.

#### **5.4.2            THEME 2: THE ROLE OF RESOURCES AND SUPPORT**

Beaulieu (2004) notes that the degree of social support contributes to the success of the treatment. Gold et al. (2000) conclude in their research that significant social support was associated with lower post-war traumatic stress symptoms in samples of Vietnam- and Israeli veterans, in two separate studies. (Ruback & Thompson, 2001) report on a large representative sample of victims and non-victims of crime that was investigated in order to determine if social support has helped victims cope with their experience. The sample consisted of both violent-crime and property-crime victims. The study investigators measured three kinds of support namely, (1) informational support (2) emotional support and (3) tangible support. Victims of violent crime who perceived that informational support was available reported lower levels of fear and anxiety. Those who perceived tangible support was available had lower levels of depression and anxiety than those who did not feel they had tangible support, and lastly, victims who had high levels of emotional support reported lower levels of depression and anxiety than victims who had low levels of emotional support.

Two respondents reinforced this viewpoint for the candidate. Respondent 9 has moved to a new specialised house in the care centre. The children in this house do not go to mainstream schools, but attend home schooling on the premises of the care centre. Because of the move, she was also allocated a new social worker. Respondent 11 is in a satellite house. This is a house within the community and the children attend mainstream schools. There are only 10 children in this type of house. This specific child has a healthy relationship with her care worker and verbalised that this house is home to her.

Respondent 9 and Respondent 11 both accessed intense material that they have dissociated from since their traumatic experiences. The candidate used different techniques to anchor both these Respondents in the present and to remind them that they are safe. Respondent 9 however verbalised that she did not feel safe enough to address her trauma and eventually decided not to complete the session. She was unwilling to complete the treatment, as reported earlier during this chapter. Respondent 11 was grounded and gained confidence every time that the candidate reminded her of her safety.

The data of the study thus correlates with literature, as it seems that children who feel safe within their environment and with significant others in their lives, might be more prone to face their trauma and effectively deal with it. Thus, social support plays a significant role in the trauma recovery process.

### 5.4.3            **THEME 3: MANAGEMENT OF STRONG REACTIONS DURING THE EMI**

Two of the Respondents experienced strong reactions during the EMI. Beaulieu (2004, p. 305) reminds that this is expected from the clients as they usually experience strong reactions during the trauma situation and the subsequent re-experiencing of the incident. According to the author, there are three ways to manage the intensity of the EMI experience, namely providing support and relief, limiting the duration of the stress, and reframing the perception. Respondent 9 chose to terminate the session before the candidate had the chance to assist her in all the above mentioned ways. However, the candidate successfully applied all three these guidelines with Respondent 11, which will be discussed below.

#### *Support and relief*

Respondent 11 witnessed the murder of a significant person in her life when she was eight years old. She dissociated from her trauma for the past six years however. She presented with anxious and frightened behaviour since the first segment of the EMI. The candidate took a small chair and put it next to the respondent, reminding her that the small child that went through the trauma is sitting on that chair and that she is safe. The candidate also reminded the respondent that the distress is only temporary and that she will experience relief. Beaulieu (2004) recommends that a therapist can also bring about relief by activating the left hemisphere of the brain, which is analytical. At one stage, the respondent felt anxious and short of breath. The candidate then asked her to do some math, which is her favourite subject. This helped to relieve her anxiety.

#### *Limiting duration*

Beaulieu (2004) points out that once the traumatic memory is activated there is no sense in repeatedly exposing the client to these distressing memories. When the traumatic material has been activated, which is the goal of the movements; it is unnecessary to inconvenience the client by prolonged re-experiencing of the trauma. The candidate brought relief to Respondent 11 by doing only three to four movements per segment. She would also frequently do movements in the beneficial quadrant therefore limiting exposure to distressing material. Respondent 11 experienced the whole bottom visual area as distressing, so the candidate did movements that would touch both the hotspots at the bottom, as well as the beneficial area, which was the top visual field.

#### *Reframing perceptions*

Respondent 11 experienced intensive visual and auditory stimulation and at one stage moved her chair about 5 meters from the candidate. The candidate decided not to force the respondent to move back to her place, but rather to continue with the segments and help the client by reframing her perceptions. The candidate decided to adjust the visual frame of the respondent to reframe the visual stimulation. Beaulieu (2004) states that a large visual frame might bring the client in contact with too much traumatic material, resulting in a sensory overload. Beaulieu (2004, p. 310)

clarifies that “by reducing the physical dimensions of the frame within which the therapist is making the guiding hand movements, the scope of the inner representation is also reduced”.

Respondent 11 physically heard the murder victim screaming, and found that unbearable. Therefore, the candidate made her two earplugs from tissue paper. It is important to note though that the client must not physically put the earplugs in her ears, as it might impair communication between the therapist and the client. Beaulieu (2004, p. 311) points out that “the earplugs are not blocking an incoming sound, but the *remembered* effect of earplugs is blocking *remembered* sounds”. The candidate constantly reminded the respondent about the earplugs. This helped the respondent to stay in touch with the experience and not to break contact when she accessed this auditory memory. Respondent 11 moved down on her distress scale (see 4.6.1.3 in Chapter 4) until she reached a two out of ten. The candidate asked the child if she was ready to move a bit closer with her chair, but she declined. After repeating a few segments, with no result, the candidate asked the child if she (candidate) could move one centimetre closer, on which she agreed. Respondent 11 experienced a slight increase in her distress levels during the first two segments after the candidate had moved forward. At the third segment, the relief was visible on the respondent’s face, while moving through the right bottom quadrant. She quietly took her chair and moved it into the original position when the therapy started. Shortly thereafter full integration of the trauma memory took place and the session could be closed.

All these techniques helped the respondent to gain control over her overwhelming emotions, which resulted in the respondent being able to integrate the traumatic material successfully.

#### **5.4.4            THEME 4: USEFULNESS OF EMI**

The usefulness of EMI was experienced on different levels during the study. Both the respondents and the candidate were able to observe and experience the effectiveness of this trauma intervention strategy. The candidate was repeatedly amazed at how the trauma pictures initially recalled by most of the respondents changed over the course of the EMI sessions.

Respondent 1 was stabbed with a knife by one of the other children in the care centre. He saw pictures of how he was stabbed in his side by the offender. He saw the blood on his hands and how the offender pulled out the knife. Later his picture changed to him in being in the position of power. He saw how he was physically attacking the offender and screams at her, letting out the anger he felt towards her. In the end, he saw himself playing rugby.

Respondent 2 was molested at a dam by her father. She had different recollections of the abusive situation she had at the beginning of the EMI session. She would for instance see how her father put his hand on her leg. She also reportedly saw the dashboard from where she lay on the seat. After the trauma information was integrated, Respondent 2 ended with a picture of the ducks swimming on the water while she watched her brothers playing. She never returned to the trauma pictures once she saw the changed visual information.

Respondent 3 and her siblings were witnesses of domestic violence. Initially her pictures revolved around scenes of the physical violence, but moved to how she saw her siblings and herself sitting under the dining table while her parents were fighting. Pictures changed to where the social worker came to their house and removed them from their parents' care. She persistently saw her mother's sad face as her father would not allow her mother to accompany the children to the place of safety. In the end, when the trauma information was integrated, she saw her mother smiling and waving, as she felt that everything was going to be all right and for the best.

Respondent 5 and his siblings were also witnesses of domestic violence. When he described the incident initially, he reported that he and his siblings were standing at the door. However, the first picture that he saw after the first eye movements was where he sits behind the bed and watches how his parents physically attack each other. Thereafter he would see different pictures of the violence, for instance, how his father throws his mother on the bed, or how his mother broke his father's finger. At the end of the therapy, the picture that he repeatedly recalled up was where he and his siblings stood up and left the empty room.

Respondent 6 experienced a visit from his toddler brother as traumatic. This brother was placed in foster care and only after about a year came to visit his siblings once. This little boy did not recognize his biological siblings on the day of his visit. The respondent saw different scenes from that visit. He saw for instance how his young brother cried for his other foster brother to take him away, as he did not want to stay with his biological siblings. He also saw his father, angered by the foster placement. In the end, the respondent saw himself standing at the window, looking down on his siblings while they are playing together in a sun-filled room, with a knowing sense that foster care was in the best interest of his youngest brother. He also verbalised that he now knows that his father was aware of the placement and probably also gave his consent.

Pictures changed rapidly for Respondent 7. He witnessed how his mother was locked up in a chicken shed and how she subsequently died mostly because of exposure. Different pictures on different abuse situations entered the mind of this child. Respondent 7 saw how his mother was lying on the floor and how his father would beat her. He also saw how his father beat him and how he pointed a nine-millimetre pistol at the domestic worker. He saw how he would creep up to the shed with a piece of bread and how he would try to feed his mother. He ended with a picture of how his father taught him how to hunt with a BB-gun. None of the pictures of his mother re-entered his mind for the remainder of the session.

Respondent 10 was a quiet boy who lost his holiday mother because of a brain tumour. This child does not have any contact with his biological parents and was very attached to his holiday parents. He still visits his holiday father. He also accessed different pictures relating the mother's death. He saw her in hospital with the bandages around her head and how she was confused because of the medication. He accessed pictures of the funeral and the sadness of the people around them. He found the last picture amusing and surprising as he saw his holiday mother sitting upright in the hospital bed without the bandages and tubes, singing a happy tune.

Different quadrants brought Respondent 11 into contact with various pictures about the night of the murder of a woman she had close relations with. At first, she saw the victim in a pink nightgown, lying on a black plastic bag. She also saw the murderers driving off in a white BMW motor vehicle, as well as how the paramedics lifted the body into the ambulance. She even saw the shadows of the murderers behind the garage door. After integration, her picture changed as she saw a picture of the murder victim, where she sits on the bed, smiling and reading a story to the respondent.

The respondents also verbalised their experiences on the usefulness of EMI. Respondent 2 exclaimed after the first view segments "Wow! This stuff really works!" whereas respondent 5 reacted in the same manner, by stating "this stuff is really helping me, explain again how it works?" Respondent 3 came back to complete her session, as she felt the benefit of the EMI. After the two-week period, the respondent reported that she felt "light" and so much better. She described it as "amazing".

The candidate was sure that Respondent 4 did not experience the full benefit of EMI, as she would constantly verbalise that she saw "nothing". Initially she struggled to follow the eye movements and presented with flat affect. The candidate was even concerned that the child may have used some or other chemical substance. This child was tested but this did not appear to be the case. The candidate still decided to include the child in the study as she completed the EMI. Interestingly, Respondent 4 appeared differently during the second TSCC. She was smiling and interacted with the candidate. She showed behaviour that was not present during the first session. She did not verbalise that she experienced any change after the EMI, but her TSCC scores definitely decreased. Nothing else changed in her environment during the two weeks and she did not receive any additional therapy. It is therefore possible that the EMI was indeed a beneficial intervention for this candidate.

When the candidate consulted with Respondent 12 for her second TSCC, the candidate explained that this second test was to determine whether the trauma symptoms stayed the same, were better or became worse. The respondent almost immediately said that the scores would definitely be lower as she felt "much better". She was disappointed to hear that the EMI consisted of only one session. Respondent 7 described the EMI as the most beneficial treatment he received since being in the care centre. The result was so evident that his social worker at the care centre requested further EMI sessions to help Respondent 7 to integrate different trauma incidents that occurred during his life.

During the EMI session, Respondent 10 was adamant that he would not experience a significant change in his symptom levels during the next two weeks. After completing the second TSCC, the candidate scored his checklist on the profile form, alongside his previous scores. After discussing possible improvements, he realised that there were significant things, such as his sleeplessness, that had indeed changed since the therapy.

According to the candidate, it seems that the EMI was experienced as beneficial at different levels. For the therapist, the changes and usefulness were evident. Some of the children were also able to report on the benefit that they experienced, whether it was during the session or after the two-week period. Other respondents were unaware of the positive changes the EMI brought to their behaviour or emotional status. Their care workers and the scores of the TSCC's serve as further evidence for those improvements.

## **5.5 SUMMARY**

The above discussion includes the analysis of the qualitative and quantitative data, which have been triangulated. Through this mixed methods approach, extensive data were collected in an attempt to provide relevant answers to the research question. The candidate was able to apply all her objectives and could therefore achieve her goal for this study, which was to explore the utilisation of EMI as a social work intervention for treating psychosocial trauma with children aged 14 to 16 years.

The results of the analysis process have been transformed into conclusions and recommendations, which will be reported in Chapter 6, the final chapter of this study.

# CHAPTER 6

## CONCLUSIONS AND RECOMMENDATIONS

### 6.1 INTRODUCTION

At the beginning of this study, the candidate pointed out that trauma is a reality in South Africa, and therefore there are many children who can be exposed to a traumatic experience. McLaughlin (2007) points out that the aim of social work research is to support as well as transform practice. The purpose of this research is to add to the body of knowledge of social work, specifically concerning the usefulness of EMI for the recovery from childhood trauma. Research on the one hand attempts to answer certain questions, but on the other hand it also creates new thoughts, ideas and questions, which in turn lead to new research. One piece of research can never answer all the questions on a topic, and therefore research must be viewed as an ongoing cycle of generating knowledge.

This research posed the following question: Is EMI a useful intervention strategy for recovering from childhood trauma? The candidate documented the proposed research process for this study in Chapter 1, followed by an extensive literature study on both EMI and childhood trauma in Chapters 2 and 3 respectively. The candidate then explained the methodology used in Chapter 4, and the results were presented and discussed in Chapter 5. This last and final chapter of the study will comprise of the conclusions from the research. These conclusions will focus on methodological as well as contextual conclusions. The candidate will also point out the limitations experienced during the study. Finally, recommendations will be made.

### 6.2 MAIN CONCLUSIONS

For the purpose of this study, the candidate focused on the methodological, as well as the contextual conclusions. The methodological conclusions entail conclusions that were made concerning the research methodology that was employed for this study. The contextual conclusions on the other hand are conclusions made in regard to the utilisation of EMI with children.

#### 6.2.1 METHODOLOGICAL CONCLUSIONS

This study involved a multi-method approach, using both qualitative and quantitative research methods. With this approach, it was possible to triangulate the data that were collected. The data

collection methods in this study were used concurrently, meaning that both the qualitative and quantitative tools were implemented at the same time. The multi method approach allowed the candidate to have a high level of confidence in the results of the study. Therefore, in conclusion, this approach has both been successfully implemented and is theoretically sound and appropriate.

In terms of the objectives of the study, it can be said that this research met all the requirements stipulated in Chapter 1. The candidate did an extensive literature study on EMI and trauma. A single session of EMI with twelve children was assessed pre and post intervention by means of the TSCC. Simultaneously, a follow-up interview was conducted with the caregivers of the children. A journal was also kept throughout the data collection process. All the collected data were analysed, and the recommendations will follow later in this chapter. Therefore it can be said that the overall goal of the study has been met, namely to explore the usefulness of EMI as an intervention strategy for the recovery of childhood trauma.

The conclusion can therefore be made that the mixed methods approach contributed to answering the research question of this particular study, and subsequently to the valuable data that have been collected.

## **6.2.2 CONTEXTUAL CONCLUSIONS**

A distinction can be made between two forms of findings within the scope of this study, namely the effectiveness of EMI for the reduction of trauma symptoms as specified by the TSCC and clinical issues related to the utilisation of EMI.

### *Effectiveness of EMI*

- According to the findings of the TSCC, it seemed that there was a significant reduction in the anxiety levels of the respondents. Not only did the interviewing data support this finding, but some of the respondents verbally reported that they were aware of a significant reduction in symptoms like disturbed sleeping patterns and anxious feelings.
- It also appears that EMI effectively reduced the depression levels of eleven of the children. This data has also been supported by the qualitative data. Some of the respondents' depression levels improved significantly, while others were more subtle.
- It seems that EMI effectively reduced the PTS levels of all twelve respondents. The qualitative data also report a significant reduction. Different care workers reported decrease in PTS symptoms like nightmares, avoidance, and poor concentration.
- Although the results of the TSCC indicate a significant reduction in both the overt dissociation and fantasy of the respondents, the care workers found it difficult to report on this phenomenon. The candidate is of the opinion that a lack of knowledge and the fact that some

of the care workers did not know the children in their houses well at that stage, contributed to this report. Some of the respondents however reported on the reduction of their dissociation symptoms.

- The sexual concerns of the respondents were also measured. There was a significant reduction in the sexual distress levels of the children, but not in the sexual preoccupation. The reports of the care workers differ on this finding, as to their knowledge no new sexual incidents occurred. This could however be because of the fact that some respondents moved to a specialised house with strict rules and boundaries.
- Finally, according to the data obtained from the TSCC, it seemed that the anger levels of nine of the respondents were reduced. This reduction however, was not statistically significant. Two of the respondents experienced external provocation on the same day that the second TSCC was completed. This could have influenced the data findings, and it is therefore unclear whether EMI is effective in reducing trauma-related anger. Owing to the contextual issues that may have confounded the data, further research on this is indicated.

In conclusion, it seems that EMI significantly reduced eight of the ten trauma symptoms, as indicated by the TSCC.

### *Clinical Issues*

Four different themes were additionally identified during the course of the study. These themes related mostly to the process of EMI and not to the trauma symptoms as such.

The first theme was related to the challenges that were met during the study. Most of the challenges can be described as the defence mechanisms that the respondents employed since the traumatic experience as a way to cope with the trauma. Some of the respondents had bodily experiences, for example nausea. This however subsided once the trauma memory was integrated. Nine of the children also dissociated from their experience during the session. They were kept in touch with the experience, which subsequently led to the integration of the trauma memory. Three of the respondents initially expressed the need to discontinue their sessions. Two of these respondents completed their therapy later, but one respondent did not want to finish her session. Her wish has been granted because of research ethics. The candidate made sure that her mood was stable before leaving the office. Since then however this respondent decided to complete her therapy. The final challenge that was experienced during this study was uneven eye tracking. Initially three respondents experienced uneven eye tracking. This improved for two of them and the EMI sessions could be completed. One candidate was not able to effectively follow any of the eye movements and therefore the conclusion can be made that in effect no EMI took place.

The second theme identified has to do with the role of resources and support in successfully completing treatment. The candidate found that the respondents who experienced acceptance and

support from the significant others in their lives, were able to feel safe enough to face their trauma experiences and deal with it accordingly.

Management of strong reactions is the third theme that was identified. Beaulieu (2004) suggests three different ways to deal with these reactions, namely (i) to bring about support and relief, (ii) to limit the duration of re-experiencing the traumatic material, and (iii) to reframe the perceptions of the client. All three methods were used with the one respondent, which resulted in effective integration of her traumatic memory.

The last theme encompassed the usefulness of EMI as experienced by the candidate as well as the respondents. During the study it was evident that the traumatic pictures changed during the course of the sessions. The anecdotal metaphor of the “3” that turns into an “8” (see 4.6.1.2 in Chapter 4) was evident in the study. The traumatic material is symbolised by the “3” with sharp and pointy edges. After the EMI session it turns into the smoother and rounded “8”, which symbolises the changed picture after trauma integration. Some of the respondents also verbalised during the course of the session how they experienced the usefulness of EMI.

EMI has been shown by other researchers and clinicians to be an effective trauma intervention strategy with adults, but its usefulness with children had never been researched before. According to this study, however, it seems that EMI is also an effective intervention strategy for integrating childhood trauma in a brief period of time. Not only did the findings show a significant reduction in most of the trauma symptoms of the respondents, but the children as well as their care workers experienced the effectiveness of EMI.

The standard EMI procedure, as described by Beaulieu (2004), was followed and was easy to administer with the children. The candidate was at first sceptical of whether the respondents would be able to understand the concept. This however did not pose any problems. Although some respondents perceived the eye movements as strange at first, they were astonished about how quick their symptoms were relieved. There were challenges during the implementation of the EMI, but most of them could be handled effectively with the strategies described by Beaulieu (2004).

The study also indicates that EMI, like most other intervention strategies, is not necessarily suitable for all children with trauma symptoms. It is important to evaluate whether a child is an ideal candidate for EMI by considering all the important aspects. EMI was found to be ineffective during this study with children who had eye movement deficits. Beaulieu (personal communication, August 31, 2008) points out that when a child is unable to follow the eye movements, in effect no EMI takes place. Therefore, there will be no therapeutic results. It is also important to predetermine the client’s level of distress, if possible. EMI is not recommended if the distress level of the child is still high. If a child is still very distressed, ego strengthening-based therapy is recommended before conducting EMI. It is however difficult to predict a child’s reaction on any trauma therapy. Social workers must therefore make sure that they know the strategies to handle strong reactions from children.

In conclusion, it therefore seems that EMI is not only a method that effectively relieves trauma symptoms, but is also a useful intervention strategy for children.

### **6.3 LIMITATIONS OF THE CURRENT STUDY**

As with any other research, this study has its shortcomings. The following are limitations that have been experienced during the research process of this study.

- Due to different unforeseen reasons, the sample for this study only consisted of children from the care centre, and none from the practice. Therefore, the findings may need to be kept within the context of children who are in care. These children are on the one hand vulnerable (in that they have been removed from their families and placed in care) but on the other hand are in a contained environment (in that they are in full time care of experienced and professional child care workers and have access to social workers on site). It is unclear whether these findings would be similar with children who are living with their families.
- Most of the respondents were residing on the same campus, which opens the possibility that the respondents may have discussed the EMI sessions and the subsequent results. If this was the case, it could influence their response to the second TSCC. Some may have felt that, because the therapy was effective for some of the children in the care centre, they needed to have the same experience and therefore over-estimated their answers on the second TSCC.
- Some of the care workers did not know the respondents in their houses well enough to participate effectively during the interview. Mostly this was because some of the respondents were moved to different houses during the two-week period of the data collection. Therefore, their care workers were not able to report extensively on the behaviour of those particular children. Although significant data were gathered from the interviews, the candidate is of the opinion that some of its value was compromised.
- Because the lives of people are not static, other variables during the two-week time frame could also have influenced the results. One respondent for example, discontinued the use of his anti-depressant within this period. This could have resulted in a different response on the second TSCC, because of an altered mood.
- The candidate is of the opinion that some of the respondents were not honest in their responses regarding the sexual concerns subscale of the TSCC. Although sexual concerns as a trauma symptom is valuable to assess, it is not helpful if it does not reflect the true experience of the respondent. This could have had a negative effect on the validity of the data.
- This was a small scale, exploratory study. The treatment efficacy results, therefore, specifically based on the TSCC, should be interpreted with caution. A larger sample with an experimental

design (including a control group or alternative form of trauma therapy) would be required before a definitive conclusion can be drawn about the effectiveness of EMI in reducing children's trauma.

## **6.4 RECOMMENDATIONS**

The recommendations made will be based on the insights gained from this particular research study. These recommendations will be discussed in terms of social work practice and education, as well as further research.

### **6.4.1 RECOMMENDATIONS FOR SOCIAL WORK PRACTICE AND EDUCATION**

EMI is recommended as an intervention strategy for social workers in various settings. This brief technique could bring relief to the heavy caseloads of social workers working in different fields of practice. A significant number of children that form part of social work caseloads have been exposed to trauma. EMI could enable social workers to effectively render services to families and communities, as more cases can be addressed in a shorter period. Social workers working in trauma units, hospitals, and rehabilitation centres could also reap the benefits from EMI. Rules and regulations of medical aids, as well as economical strain compel clients to stop treatment prematurely. Sometimes this results in incomplete service delivery in cases where trauma symptoms have been identified. EMI would also be a beneficial trauma intervention strategy for social workers working in the South African Police Service (SAPS). Cases of trauma are reported on a daily basis at police stations nationwide.

It is important to keep in mind that this was a research situation, and therefore not an ideal therapeutic environment. As a result, the benefits of an established therapeutic relationship could not be experienced with the respondents. It was important to exclude the possible therapeutic value of such a relationship, which in return could have influenced the results. It is however recommended for social workers to build a therapeutic relationship before conducting EMI.

Social workers must make sure that they are confident in utilising the recommended strategies for handling strong reactions of the children. Beaulieu (2004) notes that if therapists do not deal with strong reactions effectively, they might slow down or even interrupt the integration process. Some clients exhibit strong reactions as part of their defence mechanisms. A well-established therapeutic relationship helps the social worker to identify the children's defence mechanism, which will enable them to anticipate possible reactions.

It is important that social workers who utilise EMI are able to assess whether a child is a suitable candidate for EMI. They must consider different aspects, for example information regarding medication, the mental status of the child, and the amount of time that has elapsed since the

trauma experience. If the child is not a candidate for EMI, other effective trauma intervention strategies must be available to relieve the trauma symptoms of the child.

The social support systems, as well as the resources of the child must be evaluated before conducting the EMI. Social workers must investigate whether the child will receive sufficient support from significant others, as this may have an influence on the success of the intervention. The social worker must first establish support networks and secure attachments, before doing trauma therapy.

Children as well as their parents/caregivers need to be prepared for the EMI before starting with the intervention. EMI might be a strange concept for both parties and therefore it is imperative that both parties must feel positive about participating.

Although EMI is a brief intervention strategy, more than one session may be required. Therefore, it is important that the social worker follow up on children after using EMI. The trauma symptoms must be assessed before and after the session. This will ensure that effective services are provided.

EMI is a specialised intervention strategy, which requires training and practice. It is therefore recommended that only social workers who have received the relevant and adequate training from an accredited trainer make use of this technique.

During a research project piloted by Beaulieu (2004) on the effectiveness of EMI with adult survivors of trauma, it was found that the professionals who received the advanced training in EMI delivered the most effective results. It is therefore recommended that social workers invest in receiving both the fundamental and advanced training in this intervention strategy.

Social workers must receive regular supervision from an experienced therapist who is an expert on EMI (Beaulieu, 2004). This will ensure effective implementation of this useful therapeutic method.

Finally, trained social workers must have confidence in their ability to implement EMI effectively. If they doubt their ability to conduct this technique, it is preferable that they practice more under supervision, or totally refrain from using EMI as a trauma intervention.

## **6.4.2 RECOMMENDATIONS FOR RESEARCH**

This study did not purport to be a clinical evaluation of EMI with children, but rather an exploratory assessment of the utility of EMI as an intervention strategy with children. However, because of the positive findings of the study, a rigorous clinical evaluation of EMI is recommended. Such a study could use a larger sample of children and incorporate a control group. A crossover design could be helpful; in this design two groups would be assessed for trauma symptoms on three occasions, with one group receiving EMI between the first and second assessment and the other group

receiving EMI between the second and third assessment. Alternatively, the 'control group' could receive another form of trauma counselling.

Cross-cultural as well as gender comparisons can be considered in further studies, concerning whether there is a difference in terms of the usefulness and effectiveness of EMI. This could not be done in the current study due to the small sample size.

The sample for this study was selected from a specific age range, viz 14 to 16 years. It could be valuable to determine the usefulness and effectiveness of EMI with younger children, for example within the age range of 8-13 years or younger.

There is significant evidence in contemporary literature to show that trauma has a detrimental effect on the developing brain of younger children. Complex trauma is a term that has been adopted by the mental health profession to describe the experience of severe, recurring stressors in the early developmental stage of a child's life, usually interpersonal by nature, for example child maltreatment (Kinniburgh et al., 2005; Van der Kolk, 2005). Weitzman (2005) points out that older children (as in the sample in this study), however, may suffer serious posttraumatic stress symptoms, but because of the fact that the critical brain development period has passed, they will not sustain injury to the basic fundamental structures of the brain. Although some of the respondents did indeed suffer complex trauma at a very young age, it would be of great value to compare the usefulness of EMI between children with and without complex trauma.

As mentioned in section 6.3, the candidate is of the opinion that some of the respondents were not honest in regards to the sexual concerns subscale of the TSCC. It might be more useful in future studies to use the alternative version, namely the TSCC-A, which excludes the sexual concerns subscale.

A time series study could also be valuable for future research, where more than one session of EMI is conducted, and the trauma symptoms are assessed after each session.

This study had a small sample. A larger sample would improve the statistical power of the study and would therefore be recommended in a more rigorous study. Although the short-term decrease of trauma symptoms was measured during this study, it might be significant to measure the long-term improvements by a follow-up study. This would determine whether EMI relieves the long-term consequences of childhood trauma.

The results of EMI from different therapists would also be a valuable variable to measure. The influence of the therapist on the effectiveness and usefulness of EMI can then be established. In a study conducted by Beaulieu (2004), it was found that therapists who received both the fundamental and advanced training in EMI, were more successful than those who received just the fundamental training. It could be interesting to measure this variable in regard to EMI with children.

## 6.4 FINAL CONCLUSION

Social workers in South Africa should be open to new and effective intervention strategies, which must form part of generalist integrative social work service delivery on macro, mezzo and micro level. They must be able to assess the needs of their client and to empower and enable them.

Eye Movement Integration Therapy (EMI) can be described as an empowering technique, as the traumatic memories of children are integrated in a shorter period. After the integration, resources are activated which are empowering for the client. This enables clients to have the opportunity to be future orientated and not problem saturated. EMI assists the process to help the children of South Africa become healthy functioning adults.

Comparing the results with the overall goal, it seems that this is a successfully completed research study. The study was done according to processes indicated by social science research and the results are therefore just, reliable and valid. The findings contribute to existing social work knowledge and provide answers to the research question. It can therefore be concluded that the candidate achieved the purpose, aim and objectives of the study. According to the findings, it seems that EMI is a useful intervention strategy for children recovering from trauma.

It is not the intention of the study to imply that EMI is a quick fix for complex situations. It is however, the candidate's contention that EMI as part of an intervention plan can promote effective and goal orientated social work services in South Africa. It takes several bricks to build a strong house, as it takes several healthy children to build a strong and upcoming nation.

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**ANNEXURE A:  
PARENTAL CONSENT FORM**



# PARENTAL CONSENT FORM

## AN EXPLORATORY STUDY ON THE USEFULNESS OF EYE MOVEMENT INTEGRATION THERAPY (EMI) IN OVERCOMING CHILDHOOD TRAUMA

Dear Parent,

Your child is being asked to take part in a study on the utilisation of Eye Movement Integration Therapy (EMI) as an intervention strategy for trauma. EMI is an effective treatment option for trauma symptoms.

### RESEARCHER

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**Researcher:** Elsa Struwig, social worker.  
**Purpose of study:** Part of fulfilment for Master's Degree in social work [M.A. (Soc.Sc) Clinical].  
**Institution:** University of Johannesburg  
**Supervisor:** Dr A van Breda (083 792 5152)

### GOAL OF THE STUDY

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The goal of the study is to learn if EMI is a possible treatment option for children who experienced trauma, and have trauma symptoms. EMI is a form of therapy that involves 22 eye movements as method of trauma integration. It is a brief and effective intervention strategy. Your child is being asked to take part in this study because of the fact that he/she is between the ages of 14-16 years, and has experienced trauma more than 4-6 weeks ago, with persisting trauma symptoms. Please read this form and ask any questions you may have before you agree to your child being in the study.

### DISCRIPTION OF THE STUDY

---

If you decide to let your child take part in this study he/she will be asked to take part in the following:

- Complete the Trauma Symptom Checklist for Children (TSCC), which will take 15-20 minutes for completion.
- One session of EMI will be conducted right after the completion of the TSCC, with duration of 60-90 minutes.
- Fill out the TSCC again two weeks after the session.
- No physical contact is involved

You as parent will also be asked to give information by means of an interview, two weeks after the EMI session have been conducted.

### RISK OR DISCOMFORTS

---

There is minimal risk for your child to participate in this study. He/she may experience some discomfort directly after the treatment, but please note that the integration of the trauma information continues for two weeks after the session. Your child may stop participation in the study at anytime. It is possible that he/she may need further treatment for her trauma symptoms, and that one session of EMI might not be sufficient. The presence and intensity of the trauma symptoms will be evident in the results of the second and last TSCC measurement. If it is evident that your child needs further treatment, the candidate will either supply you with names and numbers of well trained therapists or will complete the therapy at no cost.

## BENEFITS OF THE STUDY

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In a country where trauma is a vivid reality, EMI is an effective brief intervention that addresses trauma symptoms in a short period. Because of its briefness, EMI can also be described as cost-effective. Your child may experience relief from his/her trauma symptoms after one session of EMI. I, however, do not promise that your child will definitely get any benefit from helping with this study.

## CONFIDENTIALITY

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Any information obtained about your child from the research, including answers on the TSCC, history, EMI session, or the interview with you, will be kept strictly confidential. The consent forms will be kept securely along with the results after completion of the study. I will protect your child's confidentiality by coding his/her information with a number so no one can trace the answers to his/her name. The EMI session will be audio taped but will only be used for this research study and will be erased after the study is completed. The data derived from this study will be used in reports, presentations and publications but your child will not be individually identified.

## VOLUNTARY NATURE OF THE STUDY

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Your decision to allow your child to take part in the study is voluntary. Your child is free to choose not to take part in the study or to stop taking part at any time without any penalty.

## CONTACTS AND QUESTIONS

---

If you have any question now or during the study, please feel free to contact me at the following numbers or e-mail address:

012-998 6661 / 084 382 17 15 / [estruwig@mweb.co.za](mailto:estruwig@mweb.co.za)

## STATEMENT OF CONSENT

---

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to allow my child *(Print your child's name)* \_\_\_\_\_ to participate in this study. I have been told that I can change my mind and withdraw my consent to participate at any time. I have been provided a copy of this form.

*Please check the box that applies:*

- My child **may** be recorded
- My child **may not** be recorded

\_\_\_\_\_  
Name of Parent/Guardian  
Of participant (Please Print)

\_\_\_\_\_  
Signature of Parent/Guardian  
of participant

\_\_\_\_\_  
Date

**ANNEXURE B:**  
**CHILD CONSENT FORM**



# CHILD CONSENT FORM

1. My name is \_\_\_\_\_
2. We are asking you to take part in a research study because we are trying to learn more about the use of Eye Movement Integration Therapy (EMI) with children who experienced trauma.
3. If you agree to be in this study, the following will happen:
  - I will complete a checklist with you to see if you experience symptoms of trauma, and how intense these symptoms are if present.
  - Directly thereafter we will do the EMI session. This will take approximately one and a half hour, but can be longer or shorter. EMI is a therapy where the therapist uses 22 movements of the eyes in order to relieve trauma symptoms.
  - Two weeks after the session we will complete the checklist again.
  - I will also conduct an interview with your parent/guardian/housemother after our session.
4. After our session you may experience some intensification of your symptoms, or you may think about your trauma experience a bit more.
5. This study may help us to find a workable method to help children with trauma in a short time.
6. Please talk this over with your parents before you decide whether or not to participate. We will also ask your parents to give their permission for you to take part in this study. But even if your parents say "yes", you can still decide not to do this.
7. If you do not want to be in this study, you do not have to participate. Remember, being in this study is up to you and no one will be upset if you do not want to participate or even if you change your mind later and want to stop.
8. You can ask any questions that you have about the study. If you have a question later that you did not think of now, you can call me (084 3821715 / 012-998 6661) or you can ask me next time.
9. Signing your name at the bottom means that you agree to be in this study. You and your parents will be given a copy of this form after you have signed it.

\_\_\_\_\_  
Name of Child (please print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Researcher

\_\_\_\_\_  
Signature of researcher

\_\_\_\_\_  
Date

**ANNEXURE C:**

**INTERVIEWING SCHEDULE**

## INTERVIEWING SCHEDULE

### ANXIETY/ANGS

General anxiety can be described as when children frequently worry too much or display extensive fearful behaviour. They seem tense and react emotional when other children don't. Anxiety that develops because of trauma, can be general, or specific, for instance, they may be fearful now of things they were not before.

Kinders wat angs beleef openbaar gewoonlik gedrag van erge bekommernis en vrees. Hulle kom tens voor en reageer emosioneel baie erg uit wanneer ander kinders dit nie doen nie. Die angs wat veroorsaak word deur trauma kan algemeen meer spesifiek wees. Die kinders kan byvoorbeeld besonders bang wees vir goed wat hulle nie voorheen gepla het nie.

---

- Feeling afraid something bad might happen / Bang dat iets slegs mag gebeur
- Getting scared all of a sudden and don't know why/ Word skielik bang maar weet nie hoekom nie
- Scared of men/women/ Bang vir mans/vrouens
- Feeling stupid or bad/ Voel simpel of sleg
- Feeling nervous or jumpy/ Voel senuweagtig
- Being afraid of the dark/ Bang vir die donker
- Worry about things / Bekommerd oor dinge
- Is afraid that somebody will kill him/her / Bang iemand maak hom/ haar dood.

Pre-intervention	Post-intervention

### DEPRESSION/DEPRESSIE

Your child may be described as depressed if he/ she is a lot in an unhappy mood, or have feelings of sadness many times

U kind kan as depressief beskryf word indien hy/sy konstant in 'n ongelukkige bui is en oorwegende gevoelens van hartseer ervaar.

---

- Feeling lonely / Gevoel dat alleen is
  - Feeling sad or unhappy / voel hartseer of ongelukkig
  - Crying a lot and inappropriately / Huil baie en ontoepaslik
  - Hurting him/her or talking about hurting him/herself / Maak hom/haarself seer of sê dat hy/syself wil seer maak.
  - Feeling like he/she did something wrong/ Voel dat hy/sy iets verkeerd gedoen het.
  - Feeling nobody likes him/her/ Voel dat niemand van hom/haar hou nie
  - Have feelings of killing him/herself / Het gevoelens dat hom/haarself wil dood maak.
- 

Pre-intervention	Post-intervention

## ANGER/WOEDE

Children, who are angry because of trauma, may be described as irritable, hostile or aggressive. They tend to get into trouble at school.

Kinders wat woede het, as gevolg van trauma, kan beskryf word as geirriteerd, vyandig of aggressief. Hulle is geneig om in die moeilikheid te kom by die skool.

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- Arguing to much / Besonder strygerig
  - Break things unnecessarily / Breek goed onnodiglik
  - Want to hurt others or hurting others / Wil ander seer maak of maak ander seer.
  - Getting into fights / Raak in bakleiery betrokke
  - Feelings of hatred and being mad / Openbaar gevoelens van haat en kwaad.
  - Aggressive / Aggressief
- 

Pre-intervention	Post-intervention

## POSTTRAUMATIC STRESS/POSTTRAUMATIESE STRES

The current criteria for PTS require exposure to a serious traumatic event to which the child / adolescent shows an intense fearful reaction. When a child has posttraumatic stress, he/she present with certain symptoms.

Die vereistes vir PTSD is dat 'n kind blootgestel is aan 'n ernstige traumatiese gebeurtenis/se wat veroorsaak dat die kind/tiener 'n intense vreesagtige reaksie toon. Die kinder/tieners het sekere spesifieke simptome wanneer hulle PTS het.

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- Get bad dreams of nightmares / Kry slegte drome of nagmerries
  - Scary ideas or pictures pops in his/her head / Vreesaanjaende idees en prente kom in kop op
  - Flashbacks of the traumatic experience/s / Terugflitse van die traumaties insident/e
  - Try to avoid certain aspect that reminds him/her about the trauma e.g. does not want to go to a shopping mall / Probeer om die omstandighede rondom die insident te vermy bv wil nie meer winkels toe gaan of in 'n kar ry nie.
  - Gets startled easily / Hoë skrikrespons
  - Struggle to concentrate / Sukkel om te konsentreer
- 

Pre-intervention	Post-intervention

## DISSOCIATION/ DISSOSIASIE

Dissociation is when there is a disruption in memory, consciousness, identity and/or the child's perception of his/her environment. It can also manifest in disturbances of sensation, movement and other bodily functions.

Dissosiasie is wanneer daar 'n verandering is in geheue, bewussyn, identiteit en of daar 'n verandering in sy idee van sy/haar omgewing plaasvind. Dit kan ook wys in die verandering van sensasie, beweging of ander liggaamlike funksies.

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- Pretend to be someone else / Gee voor dat iemand anders is
  - Feeling dizzy / Voel lighoofdig
  - Feeling that things are not real / Meld dat voel dat dinge nie werklik is nie
  - Forgetting and cannot remember things / Vergeet dinge en kan nie goed onthou nie
  - Say that feels that he/she is not in his/her body / Ervaar dat nie in liggaam is nie
  - Daydreaming more than previously /Dagdream meer as gewoonlik
  - Try not to feel or think / Probeer om nie te dink of te voel nie.
- 

Pre-intervention	Post-intervention

## SEXUAL CONCERNS

Some children, especially those who have been sexually abused/raped have certain concerns about sexual issues. They may be distressed about sexual issues, or they may be sexually preoccupied.

Sekere kinders, veral die wat seksueel misbruik/verkrag is, mag dalk seksueel gedrag hê, Sommige kinders is seksueel geokkupeerd, terwyl ander angstigheid rondom seksuele aangeleenthede mag toon.

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- Think a lot about having sex/ Dink baie daaraan om seks te hê
  - Touching private parts a lot / Raak gereeld privaatdele aan
  - Think about touching other people's private parts / Dink daaraan om ander se privaatdele aan te raak.
  - Getting scared or upset when I think about sex or if others talk about sex / Word bang of ontsteld wanneer hy/sy aan seks dink of as ander oor seks praat.
  - Talk a lot about sex / Praat baie oor seks.
- 

Pre-intervention	Post-intervention

**ANNEXURE D:**

**JOURNAL ENTRIES**

### **SUBJECT 1: AFRICAN MALE (16)**

*THIS CHILD WAS STABBED BY A KNIFE BY ONE OF THE GIRLS IN THE CHILDREN'S HOME.*

*HIS POISON WORDS ARE: N STEM MY MET 'N MES IN MY SY. EK HET SEER.*

*HE IS ONE OF THOSE CHILDREN THAT VERBALISE THAT HE HAS NO PROBLEMS AT ALL. AFTER THE SESSION HE VERBALISED THAT HE ACTUALLY FORGOT ABOUT THE INCIDENT AND THAT IT DOESN'T BOTHER HIM AT ALL.*

*HOWEVER INTERESTINGLY ENOUGH HE DID SHOW SIGNS OF DISTRESS DURING THE SESSION. HE WOULD FOR INSTANCE BREAK CONTACT IN THE LEFT BOTTOM CORNER. HIS SAW THE BLOOD ON HIS HANDS AND HOW N PULLED OUT THE KNIFE FROM HIS SIDE. AFTER THE SESSION HIS PICTURE CHANGED TO SEEING HIMSELF FIGHTING BACK AND SCREAMING THE ANGRY FEELINGS HE FELT. THIS DENIAL OF DISTRESS AND ACTUAL NON-VERBAL SIGNS IS ACCORDING TO ME A SIGN OF DISSOCIATION. WHEN I MARKED THE TSCC, THIS WAS ALSO THE SUBSCALE THAT WAS SLIGHTLY ELEVATED.*

*I WONDERED IF IT WAS NOT BETTER TO DO THE TSCC AFTER I DID THE "INTERVIEW" ON THE TRAUMATIC EXPERIENCE SO THAT IT WOULD BE BETTER CONNECTED. WITH THIS CHILD I EXPLAINED THE EMI PROCESS FIRST, THEN THE TSCC, AND THEN SELECTED A TRAUMATIC EXPERIENCE. OR MAYBE I HAD TO DO A MORE EXTENSIVE INTERVIEW. WITH THIS CHILD I DID SOME LEADING AS I COULD NOT RETRIEVE ANY OTHER INCIDENTS OUT OF HIM. LUCKILY I TALKED TO THE SOCIAL WORKER BEFORE THE SESSION WHO TOLD ME ABOUT THE STABBING INCIDENT, AND THEREFORE I COULD LEAD THE SESSION.*

*ALL IN ALL IT WAS NOT A BAD START FOR MY DATA COLLECTION.*

### **SUBJECT 2: WHITE FEMALE (16)**

*W WAS ALLEGEDLY SEXUALLY ABUSED BY HER FATHER. WE STARTED WITH THE IDENTIFICATION OF THE INCIDENT FIRST. THE INCIDENT THAT SHE CAME UP WITH IS ACTUALLY A SURPRISE. ACCORDING TO THE PERSONNEL OF THE HOME THIS WAS THE FIRST TIME IN HER 10 YEAR STAY THAT SHE DISCLOSED THE ABUSE. THIS MADE ME REALISE THAT THE FACT THAT I AM NOT RELATED TO THE HOME AND THAT THIS IS A RESEARCH ENVIRONMENT IS ACTUALLY THERAPEUTICALLY BENEFICIAL FOR THE CHILDREN. I AUTOMATICALLY REALISED THAT IT WOULD BE MORE EFFECTIVE FOR THIS CHILDREN (IN AN IDEAL WORLD) IF THE SOCIAL WORKERS WERE NOT THE THERAPISTS AS WELL, BUT IT MUST BE SOMEONE ELSE NOT CONNECTED TO THE DISCIPLINE AND STATUTORY ROLES.*

*HER POISON WORDS WERE: THAT DAY AT THE DAM. DAD TOUCHED MY PRIVATE PARTS. I THOUGHT IT IS LOVE*

*I STARTED TO EXPLAIN THE PROCEDURE. THIS TIME I DID THE TSCC AFTER WE IDENTIFIED THE INCIDENT. WE DID NOT HOWEVER DISCUSS THE DETAIL. JUST DID THE IDENTIFICATION. AT THIS STAGE I ALSO WORKED OUT A METAPHOR TO USE IN ORDER TO EXPLAIN WHAT I AM LOOKING FOR. SHE UNDERSTOOD IMMEDIATELY AND IT WORKED LIKE A CHARM! I USED THE FOLLOWING WORDS:*

*YOU KNOW HOW A TV HAS MANY PIXELS THAT MAKE UP THE WHOLE PICTURE (EXPLAIN WHAT A PIXEL)? WE ALSO HAVE MANY PIXELS IN OUR LIFE THAT MAKES OUR LIFE PICTURE AS IT IS NOW. SOME OF THEM ARE GOOD, AND SOME OF THEM ARE BAD. I WANT YOU TO THINK OF ONE PIXEL THAT STILL AFFECTS YOUR LIFE TODAY IN A NEGATIVE WAY".*

*SHE TRIED TO AVOID MIDDLE LEFT QUADRANT. IN THE BEGINNING HER PICTURES CONSISTED OF DIFFERENT ASPECTS OF THE ABUSE. AFTER ABOUT 10 MINUTES SHE LOOKS UP AND SAYS "WOW! HIERDIE GOED WERK RERIG!". THIS WAS AMAZING! SHE EXPERIENCED TOTAL RELIEVE AFTER THE SESSION. THE PICTURE SHE SAW IN THE END OF HER THERAPY WERE THE DUCKS ON THE DAM AND HER YOUNGER BROTHERS PLAYING IN THE WATER.*

### **SUBJECT 3: WHITE FEMALE (15)**

*THIS CHILD HAS NEVER FINISHED ANY THERAPEUTIC INTERVENTION. SHE HAD NEVER DISCLOSED INFORMATION BEFORE AND USUALLY STARTS TO CRY BEFORE THE SESSION AND STORMS OUT IN THE MIDDLE, OR WOULD CRY THE WHOLE SESSION WITHOUT UTTERING A WORD.*

*POISON WORDS: DIE DAG TOE PA VIR MA GESLAT HET. PA GRYP 'N MES. ONS SIT ONDER DIE TAFEL. ONS WORD WEGGEVAT DEUR DIE WELSYN.*

*INITIALLY SHE PARTICIPATED WONDERFULLY, BUT IMMEDIATELY STARTED TO CRY. SHE EXPERIENCED PHYSICAL AND EMOTIONAL DISCOMFORT IN THE LOWER QUADRANTS AND REPORTED THAT SHE FELT A BIT NAUSEAS WITH MILD CHEST PAINS. SHE SAID THAT SHE WANTED TO DISCONTINUE THE SESSION, WHICH I IMMEDIATELY DID (BECAUSE OF RESEARCH ETHICS AND THE CONSENT FORM). I DID SOME RELAXATION EXERCISES AND SHE IS COMPLETELY CALM WHEN SHE LEFT THE THERAPY ROOM. SHE RETURNED LATER AND SAID THAT SHE FELT SOMEHOW BETTER AND WANTED TO FINISH HER SESSION. THIS WAS A FIRST AS SHE HAS NEVER FINISHED THERAPY BEFORE.*

*IN RETROSPECT I WONDER IF I COULD HAVE HELPED HER TO COPE BETTER IN THE FIRST HALVE OF THE SESSION. THEN AGAIN, I DID HELP HER AS SHE RETURNED TO COMPLETE HER THERAPY. SHE SAW HER MOTHER'S SAD FACE WHEN THEY ARE REMOVED BY THE SOCIAL WORKER AND DIFFERENT ASPECTS OF THE FIGHT BETWEEN HER PARENTS.*

*THE SECOND PART OF HER SESSION WENT SMOOTHLY. SHE DID NOT CRY ONCE AND EXPERIENCED EXTENSIVE RELIEVE AFTER ABOUT 10 MINUTES. SHE ENDED WITH A PICTURE OF HER MOTHER WAVING GOOD BYE AND A KNOWING FEELING IN HER OWN BODY THAT EVERYTHING WORKED OUT FOR THE BEST AND IS FINE NOW. J REPORTED SIGNIFICANT RELIEF AFTER THE SESSION. SHE MENTIONED THAT SHE SLEPT BETTER AND DID NOT HAVE SO MUCH NIGHTMARES.*

#### **SUBJECT 4: WHITE FEMALE (15)**

*ACCORDING TO THE SOCIAL WORKERS, THIS CHILD IS EXTREMELY SEXUALLY OCCUPIED. IT IS SO EXTREME THAT SHE IS NOT ALLOWED TO MOVE FREELY ON THE PREMISES, AS SHE WOULD HAVE SEXUAL INTERCOURSE WITH ANYBODY WHO IS WILLING. SHE IS HOWEVER NEVER OPEN FOR THERAPY AND DENIES THAT SHE IS SEXUALLY ACTIVE, ALTHOUGH SHE HAS BEEN CAUGHT IN THE ACT SEVERAL TIMES. SHE WOULD SAY THAT THEY WERE JUST SLEEPING. HER INCIDENT THAT SHE CHOSE WAS THE REMOVAL FROM HOME.*

*POISON WORDS: DIE DAG TOE EK VAN MY MA AF WEGGEVAT IS. EK HET NIE GEWEET WAT GEBEUR NIE.*

*SHE APPEARED TO HAVE A BLUNTED AFFECT ON THE DAY OF HER SESSION. SHE WAS INITIALLY UNABLE TO FOLLOW THE EYE MOVEMENTS. WOULD FOR INSTANCE LOOK STRAIGHT FORWARD AND WHEN I WOULD SAY "FOLLOW MY FINGERS" SHE WOULD RESPOND "BUT I AM FOLLOWING YOUR FINGERS". I CONFIRMED THAT SHE IS ON NO MEDICATION. AFTER TWO SEGMENTS SHE WAS ABLE TO FOLLOW THE MOVEMENTS. SHE APPEARED TO BE UNABLE TO COME IN CONTACT WITH THE TRAUMATIC EXPERIENCE (OR SO IT APPEARED). SHE WOULD JUST RESPOND THAT SHE DOES NOT SEE/EXPERIENCE ANYTHING. THIS UNNERVED ME BUT I CONTINUED AND FINISHED THE SESSION.*

*WITH THE 2<sup>ND</sup> TSCC IT WAS LIKE SEEING A WHOLE NEW CHILD ALL TOGETHER. SHE SHOWED EMOTIONAL AND PHYSICAL EXPRESSION. WHAT SURPRISED ME WAS THAT REGARDLESS OF THE FACT THAT I DID NOT EXPERIENCE THE SESSION AS A SUCCESS, HER TSCC SHOWED A DECREASE IN MOST OF HER SUBSCALES.*

*SHE WAS NOT HONEST IN COMPLETING THE TSCC IN REGARDS TO SEXUAL CONCERNS, WHICH MADE ME WONDER ABOUT THE EFFICIENCY OF THE TSCC IN THIS REGARD. WHAT TEENAGER WOULD BE TOTALLY HONEST WITH A STRANGE LADY? THE SUBSCALE WAS STILL HIGH, WHICH SHOWS THAT SOME OF THE ASPECTS WERE PICKED UP. I JUST THINK THAT THE TSCC-A WOULD PROBABLY HAVE BEEN A BETTER OPTION, AS IT DOES NOT HAVE THE SEXUAL CONCERNS SUBSCALE IN.*

#### **SUBJECT 5: WHITE MALE (14)**

*INITIALLY I DID NOT THINK OF M AS AN IDEAL CANDIDATE, AS HIS LEFT EYE WAS JUMPING (LIKE A TIC) THE WHOLE TIME DURING THE INTERVIEW. THE INCIDENT THAT HE CHOSE WAS DOMESTIC VIOLENCE BETWEEN HIS MOTHER AND FATHER.*

*POISON WORDS: DIE DAG TO MY OUEERS BAKLEI HET. MY PA STAMP MY MA OP DIE BED. MA BREEK PA SE VINGER.*

*HE EXPERIENCED DISTRESS IN RIGHT BOTTOM QUADRANT. I SLOWED DOWN THE MOVEMENTS DURING THAT TIME TO HELP HIM MOVE THROUGH THE "HOT SPOTS". THEREAFTER HE EXPERIENCED RELIEVE AND ALSO TOLD ME "SJOE TANNIE, DIE GOED HELP BAIE, MAAR HOEKOM?". I REMEMBERED IN DANIE BEAULIEU'S BOOK SHE WARNED THAT THIS MAY BE A WAY OF THE CLIENT TO TRY AND MOVE AWAY FROM THE TRAUMA INFORMATION, THEREFORE I SAID "BYT VAS, EK SAL JOU NA DIE TYD MOOI VERDUIDELIK".*

ALTHOUGH HE SAID IN THE INTERVIEW THAT THEY WERE STANDING AT THE DOOR, DURING THE SESSION HE SAW HIMSELF SITTING BEHIND THE BED. COULD IT BE ANOTHER INCIDENT THAT WAS SURFACING IN HIS MEMORY? AT THE END OF THE SESSION HE SAW HIMSELF STANDING UP AND MOVING SAFELY TO THE DOOR AND PLAYING WITH HIS BROTHER AND SISTERS. THE JUMPING OF HIS EYES WERE NOT A PROBLEM AT ALL. IT STOPPED JUMPING AS SOON AS THE EYE MOVEMENTS BECAME FOCUSED. IT DID NOT JUMP AFTER THE SESSION AND NEITHER DURING THE 2<sup>ND</sup> TSCC.

#### **SUBJECT 6: AFRICAN MALE (16)**

THIS CHILD WAS DESCRIBED AS "GOOD AND WELL BEHAVED" BY DIE STAFF. HE BUNKED SCHOOL DURING THE PREVIOUS QUARTER, WHICH WAS A CONCERN, AS HE NEVER PRESENTED BEHAVIOUR LIKE THIS BEFORE. THE INCIDENT THAT HE CHOSE WAS WHEN HIS YOUNGER BROTHER WAS PLACED IN FOSTER CARE AND CAME TO VISIT, BUT HE DID NOT RECOGNISE HIS BROTHERS AND SISTERS. INITIALLY I FELT THE URGE TO ASK HIM TO CHOOSE A "MORE TRAUMATISING" INCIDENT, BUT REALISED THAT THIS IS MY OWN PERCEPTION AND REMINDED MYSELF ABOUT THE DEFINITION OF TRAUMA.

POISON WORDS: DIE DAG TO P DIE LAASTE KEER KOM KUIER HET BY VREEMDE MENSE WAT EINTLIK SY BROERS EN SUSTERS WAS.

INITIALLY, DURING THE FIRST FEW SEGMENTS, HE WAS VERY ANGRY AND FELT AGGRESSIVE. INITIALLY HE WAS TALKING ABOUT HIS FEELINGS OF HOW ANGRY HIS FATHER WAS GOING TO BE WHEN HE FOUND OUT. LATER HE CAME TO REALISE THAT HIS FATHER PROBABLY GAVE PERMISSION. THIS IN RETURN MADE HIM ANGRY TOWARDS HIS FATHER. HIS PICTURE CHANGED IN THE END AND HE SAW HIS BROTHER SITTING AND PLAYING IN A ROOM WITH HIS YOUNGER SISTERS. M SAW HIMSELF STANDING AT THE WINDOW AND LOOKING AT THEM, THINKING THAT IT WAS PROBABLY FOR THE BEST FOR HIS BROTHER, RATHER THAN GROWING UP IN THE HOME.

#### **SUBJECT 7: WHITE MALE (15)**

R WITNESSED HOW HIS FATHER KILLED HIS MOTHER BY LOCKING HER INTO A CHICKEN SHED WITHOUT WATER AND FOOD. SHE DIED AFTER SOME TIME BECAUSE OF EXPOSURE. THIS IS NOT AN INCIDENT THAT THE CHILD TALKS ABOUT, SO IT WAS YET AGAIN A SURPRISE WHEN HE IDENTIFIED THIS AS HIS INCIDENT HE WANTED TO WORK ON. HIS POISON WORDS WERE A BIT LONG AND IN RETROSPECT I THINK IT SHOULD HAVE BEEN A BIT SHORTER.

PA SLUIT VIR MA IN DIE HOENDERHOK TOE. PA SKIET LANGS DIE OUSIE MET SY 9MIL. PA GRYP VIR MA EN GOOI HAAR IN. HY SLUIT DIE DEUR MET 'N KETTING.

R WAS UNABLE TO GO TO THE MIDDLE LEFT QUADRANT. HE MOVED SMOOTHLY THROUGH THE MOVEMENTS AND THE PICTURES CHANGED CONSTANTLY. AT FIRST HE SAW HIS MOTHER IN THE CHICKEN SHED, HOW HE TRIED TO HELP HER, HOW SHE LAY LIFELESS, HOW HIS FATHER LAID DRUNK ON THE COUCH AND HE TRIED TO GET THE KEYS TO OPEN THE LOCK. HE WAS NOT SUCCESSFUL. IN THE END HE SAW HOW HIS FATHER TAUGHT HIM HOW TO USE THE BB-GUN. R CONFIRMED DURING THE SESSION THAT HE IS EXPERIENCING HIGH LEVELS OF RELIEVE. I DEFINITELY EXPERIENCED THE USEFULNESS OF EMI WITH THIS CHILD DURING THE SESSION.

I DO THINK THAT EMI WAS VERY BENEFICIAL FOR THIS BOY, BUT HE DEFINITELY NEEDS MORE SESSIONS. ACCORDING TO HIM HE HAD SEVERAL THERAPY SESSIONS WITH DIFFERENT THERAPISTS, BUT HE NEVER FELT "BETTER". THIS TIME AROUND HOWEVER HE FOUND THE EMI VERY HELPFUL

#### **SUBJECT 8: BLACK MALE (14)**

THIS CHILD IS ON RISPERDAL, RITALIN AND AN ANTI-DEPRESSANT. HE WAS INITIALLY SWEET AND KIND WHEN ENTERING THE OFFICE. I HAD DIFFICULTY TO EXPLAIN THE PROCEDURE TO HIM, AS HE DID NOT UNDERSTAND. I WONDER ABOUT HIS POSSIBLE INTELLECTUAL POTENTIAL. THE INCIDENT THAT HE CHOSE WAS ONE OF THE MANY PHYSICAL ABUSE INCIDENCES BY HIS MOTHER.

POISON WORDS: DIE TYD TOE MA MY MET DIE BUCKLE GESLAT HET. DIT WAS SONDAG. DIT WAS SEER EN DAAR WAS HALE.

AFTER THE INTERVIEW, BUT BEFORE THE MOVEMENTS D SAID THAT HE DID NOT WANT TO CONTINUE AT THAT STAGE. I EXPLAINED AGAIN THAT IT WAS HIS CHOICE WHETHER HE WANTED TO PART-TAKE IN THE RESEARCH OR NOT. NOBODY WAS GOING TO BE ANGRY IF HE DECIDED TO DISCONTINUE. D HOWEVER SAID THAT HE WANTS TO CONTINUE, BUT AT 12:00 (THAT'S AN HOUR LATER!), AND I AGREE. WHEN HE CAME BACK, I MADE IT CLEAR AGAIN THAT HE DID NOT HAVE TO DO THE EMI. HE INSISTED. D

WAS TOTALLY UNABLE TO FOLLOW THE EYE MOVEMENTS THROUGHOUT THE THERAPY AND FREQUENTLY BROKE CONTACT. HE WAS UNABLE TO STAY WITH THE EXPERIENCE. AFTER THE SESSION WAS COMPLETED THE CHILD RETURNED TO THE OFFICE AND SAID THAT HE WAS NOT GOING TO LEAVE UNTIL HE CAN GO TO HIS MOTHER. EVENTUALLY HE WAS WILLING TO GO TO THE PRINCIPAL'S OFFICE. AFTER AN HOUR HE CALMED DOWN.

THE DAY OF THE 2<sup>ND</sup> TSCC HE WALKED IN AND WAS VERY MAD AND AGGRESSIVE. I REMINDED HIM AGAIN THAT HE DID NOT HAVE TO PARTICIPATE AND THAT HE COULD LEAVE THE OFFICE AND GO HOME IF HE WANTED TO. HE HOWEVER REFUSED TO GO AND RANT ABOUT THE CHILDREN'S HOME THAT DID NOT WANT HIM TO GO TO HIS MOTHER. HE THREATENED TO ABSCOND AGAIN (LIKE IN THE 1<sup>ST</sup> SESSION) AND I GOT THE FEELING HE TRIED TO MANIPULATE ME. I DID NOT RESPOND IN A WAY THAT COULD PROVOKE HIM. THEREAFTER HE COMPLETED THE TSCC AND WENT HOME.

THIS WAS NOT SUCCESSFUL. THIS CHILD WAS TOO LABILE AND MANIPULATIVE. I ALSO WONDERED ABOUT THE INFLUENCE OF THE MEDICATION ON HIS INABILITY TO FOLLOW THE SEGMENTS. HE WAS THE ONLY CHILD THAT I SAW THAT WAS ON RISPERDAL AND RITALIN (?). I MUST CONTACT DANIE BEAULIEU TO GET HER OPINION IN THIS REGARD.

### **SUBJECT 9: WHITE FEMALE (16)**

ACCORDING TO THE PERSONNEL OF THE HOME, THIS CHILD TOOK PART IN A SEX ORGY THE PREVIOUS YEAR. SHE WAS ALSO INVOLVED IN SEVERAL SEXUAL RELATIONSHIPS ON CAMPUS. ACCORDING TO HER PREVIOUS SOCIAL WORKER, THIS GIRL DISCLOSED SEXUAL ABUSE BY HER PREVIOUS STEPFATHER. SHE MOVED TO THE SPECIALISED HOME DURING THE SCHOOL HOLIDAY. SHE CLAIMED THAT IT WAS ONLY TOUCHED HER PRIVATE PARTS ONCE WHEN SHE WAS LYING NEXT TO THE BED. THE SUBJECT IMMEDIATELY VOLUNTEERED THE ABUSE AS THE INCIDENT SHE WANTED TO WORK ON.

POISON WORDS: DIE DAG TOE OOM J MY GEMOLESTEER HET. HY'T MY GEFORCE. EK HET SEER EN DIT BLOEI.

DURING SE SESSION SHE WAS ALSO CONSTANTLY DISSOCIATING FROM THE INCIDENT. ESPECIALLY IN THE LEFT CORNER, SHE SMELLED HIS BODY ODOUR. SHE ACCESSED A LOT OF INFORMATION THAT SHE DISSOCIATED FROM, FOR INSTANCE THAT THE PERPETRATOR PENETRATED HER WITH HIS PENIS. M DECIDED THAT SHE DID NOT WANT TO COMPLETE THE THERAPY, AND DISCONTINUED BEFORE SHE COULD EXPERIENCE TOTAL RELIEVE. I DID SOME GUIDED IMAGING AND SPEND ANOTHER HOUR WITH HER UNTIL I WAS SURE THAT SHE IS STABLE AND CALM.

IN RETROSPECT, I THINK THERE WERE SOME THINGS THAT I COULD HAVE UTILISED TO HELP HER RELIEVE HER DISTRESS, FOR EXAMPLE "SEPARATING" HER FROM THE YOUNG CHILD THAT IT HAPPENED TO. I TRIED TO ANCHOR HER BY GIVING HER A TEDDY BEAR, AND REMINDED HER THAT SHE WAS SAFE. IN THE END SHE REPEATED THAT SHE IS NOT CURRENTLY SAFE. MAYBE THIS IS WHY SHE WAS NOT ABLE TO COMPLETE THE TREATMENT. IT JUST SHOWED HOW IMPORTANT IT IS FOR THE CLIENT TO BE IN AN ENVIRONMENT THAT HE/SHE FEELS SAFE IN. THIS CHILD WAS IN A NEW HOUSE AND HAD A NEW SOCIAL WORKER. THIS DID NOT MAKE HER FEEL SAFE CURRENTLY. SHE DID NOT HAVE A RELATIONSHIP OF TRUST IN ANYBODY ON THE CAMPUS. I WAS SURPRISED WHEN SHE INDICATED WITH HER LAST TSCC THAT SHE WOULD LIKE TO CONTINUE THERAPY. THEREFORE I WILL RETURN TO THE CHILDREN'S HOME TO HELP HER TO COMPLETE HER RECOVERY PROCESS

### **SUBJECT 10: WHITE MALE (14)**

B HAS THE SAME HOLIDAY PARENTS FOR THE PAST FIVE YEARS. HE DOES NOT HAVE ANY CONTACT WITH HIS PARENTS, MOSTLY OUT OF OWN CHOICE. EARLIER THIS YEAR HIS HOLIDAY MOTHER PASSED AWAY DUE TO A BRAIN TUMOUR. B EXPERIENCED IT AS VERY TRAUMATIC. THIS IS ALSO THE INCIDENT THAT HE CHOSE FOR HIS THERAPY.

POISON WORDS: TANNIE A LÉ IN DIE BED IN DIE HOSPITAAL. SY HET 'N TUMOR EN SY HET DOODGEGAAN

DURING THE SESSION HE MOVED DOWNWARDS WITH HIS SCALE UNTIL HE WAS AT NO 1. HE REFUSED TO GO TO A '0' AND SAID THAT HE WILL ALWAYS BE AT A '1' FOR HE WILL ALWAYS MISS HER AND FEEL THE LOSS. HIS PICTURE HOWEVER CHANGED. IN THE BEGINNING HE SAW HOW SHE LIED IN THE HOSPITAL BED WITH ALL THE TUBES AND PIPES, AND HOW CONFUSED SHE WAS BECAUSE OF THE MEDICATION. HE ALSO SAW THE CHURCH AT THE FUNERAL AN HOW SAD EVERYBODY WERE. IN THE END HOWEVER HE SAW HER LYING IN HER BED AT HOME, BUT SHE WAS SMILING AND BEAUTIFUL.

WITH THE 2<sup>ND</sup> TSCC, HE CHALLENGED ME AND SAID THAT ALL HIS SUBSCALES WILL BE THE SAME. I DID NOT COMMENT AS I DID NOT WANT TO INFLUENCE HIM. AFTER DOING THE CHECKLIST, I RESUMED THE CONVERSATION, ASKING HIM IF HE DID NOT FEEL

BETTER. WE TALKED ABOUT PREVIOUS SYMPTOMS THAT BOTHERED HIM, LIKE NIGHTMARES AND SLEEPLESSNESS. HE CONFESSED THAT THIS WAS BETTER, BUT THAT HE DID NOT THINK ABOUT IS THAT WAY. I SCORED HIS CHECKLIST AND SHOWED IT TO HIM TOGETHER WITH THE 1<sup>ST</sup> ONES' SCORES. HE WAS AMUSED THAT HIS SCORES DID INDEED DECREASE, EXCEPT FOR HIS ANGER-LEVEL. HE HIMSELF HOWEVER EXPLAINED THAT HE IS FURIOUS BECAUSE SOMEBODY STOLE HIS I-POD.

#### **SUBJECT 11: AFRICAN FEMALE (14)**

P IS APPARENTLY HIGHLY INTELLIGENT. SHE WITNESSED A MURDER OF SOMEBODY CLOSE TO HER, ABOUT 8 YEARS BEFORE BUT DID NOT SPEAK TO ANYONE ABOUT IT AND REFUSED THERAPY. SHE IS IN A SATELLITE HOUSE AND HAS A SECURE ATTACHMENT WITH HER CARE WORKER.

**POISON WORDS:** THE NIGHT THAT R WAS MURDERED. SHE'S LYING ON A BLACK PLASTIC BAG

SHE WAS HIGHLY DISTRESSED SINCE THE BEGINNING OF THE SESSION AND HER FEAR WAS VISIBLY OBSERVABLE. I PUT A SMALL CHILDREN'S CHAIR NEXT TO HER AND SAID "THIS IS SMALL P THAT WAS THERE THE NIGHT OF THE MURDER. YOU ARE BIG P. YOU ARE SAFE". AS SHE DID NOT HAVE ANY PARTICULAR THING ON HER TO ANCHOR HER, I TOLD HER TO HOLD HER THUMB. P WAS CONSTANTLY DISSOCIATING FROM THE EXPERIENCE. HOWEVER AFTER I HELPED HER TO STAY IN TOUCH WITH THE TRAUMA, SHE COULD PHYSICALLY HEAR THE WOMAN SCREAMING. P FOUND THE LOWER RIGHT QUADRANT EXTREMELY DISTRESSFUL, BECAUSE OF THIS SCREAMING. SUDDENLY SHE TOOK HER CHAIR HAND MOVED ABOUT 5M AWAY FROM ME. I WAS SLIGHTLY THROWN OFF, BUT CONTINUED WITH THE MOVEMENTS. AS SHE FOUND THE SCREAMING VERY STRESSFUL, I MADE HER 2 "EARPLUGS" WITH TISSUE AND PLACE ONE IN EACH HAND. I REMINDED HER OF HER EARPLUGS EVERY TIME SHE FELT DISTRESSED. I ALSO REDUCED THE NUMBER OF SEGMENTS TOT 3/4 MOVEMENTS AS SHE FOUND IT TOO DISTRESSING.

SLOWLY BUT SURELY WE MOVED DOWN WITH THE SCALE. BY THE TIME WE CAME TO 3, I ASKED HER IF SHE WAS PREPARED TO MOVE FORWARD, EVEN A LITTLE BIT. SHE INDICATED THAT SHE WAS NOT READY. SHE THEN MOVED TO 2, AND I ASKED HER AGAIN, AND AGAIN SHE DECLINED. I DID SOME MORE MOVEMENTS AND ASKED HER IF I COULD MOVE JUST 1 CM, AND SHE AGREED. I MOVED MY CHAIR ABOUT 1 CM FORWARD. THE FIRST 2 SEGMENTS WERE VERY DISTRESSFUL AGAIN. SUDDENLY HER WHOLE FACE RELAXED. SHE TOOK HER CHAIR AND MOVED IT CLOSE TO ME, KNEE AGAINST KNEE. SHE SAID THAT SHE SAW THE WOMAN SITTING ON THE BED IN THE SAME NIGHTGOWN, READING TO HER AND SMILING DOWN. THIS WAS IN THE RIGHT BOTTOM QUADRANT. I DID ALL THE SEGMENTS AGAIN, AND SHE SAW THE SAME PICTURE. INTEGRATION WAS SUCCESSFUL.

IT WAS EVIDENT TO ME THAT SHE FELT TRULY SAFE WHEN I REMINDED HER. I WOULD ASK HER "WHO IS SITTING IN THE SMALL CHAIR?" AND "WHO IS SITTING IN THE BIG CHAIR". REMEMBER YOU ARE SAFE. I THINK THIS WAS ONE OF THE DIFFERENCES BETWEEN HER AND NO 9. I ALSO PULLED ALL THE "TRICKS" OUT OF THE HAT; SOMETHING MAYBE WOULD HAVE MADE A DIFFERENCE WITH 9. ANOTHER DIFFERENCE HOWEVER IS THAT NO 9'S PERSONAL INTIMATE SPACE WAS VIOLATED IN A FORCEFUL WAY, WHICH WAS NOT THE CASE WITH 11.

#### **SUBJECT 12: AFRICAN FEMALE (14)**

THE FIRST THING THAT C SAID WAS "EK SIEN SPOKE". HER FACIAL EXPRESSION LOOKED ASTOUNDED AND IN ANTICIPATION AT THE SAME TIME. S HAD BEEN GANG-RAPED BY A GROUP OF MEN, AND HAS BEEN MOLESTED BY HER GRANDFATHER. WHAT WORRIED ME WAS THAT SHE WOULD ADD SOME FANTASTICAL ELEMENTS. SHE WOULD FOR INSTANCE CONTRADICT HERSELF WITH SOME OF THE FACTS. HER HYPER RESPONSE SCALE WAS SLIGHTLY ALLEVIATED. HER SEXUAL DISTRESS SCALE WAS ALSO VERY HIGH, THAT INDICATED THAT SHE WAS PROBABLY NOT MAKING IT UP. C MENTIONED TO ME THAT SHE "SEES MOVIES IN HER HEAD". THIS SEEMED MORE LIKE FLASHBACKS.

**POISON WORDS:** MY MOLESTERING. EK IS VASGEMAAK MET TOU. EK HET BAIE SEER

SHE EXPERIENCED RELIEVE AND THE PICTURES CHANGED CONTINUOUSLY. SHE CHOSE THE GANG RAPE, BUT I THINK MAYBE THE POISON WORDS ARE TO NON-SPECIFIC. SHE CLAIMED TO FEEL MUCH BETTER AND WAS DISAPPOINTED TO HEAR THAT THE THERAPY WAS ONLY FOR ONE SESSION. DURING THE LAST TSCC SHE TOLD ME OUT OF HER OWN THAT SHE FELT MUCH BETTER AND THAT SHE DID NOT FEEL SO SCARED ANY MORE. I ASKED HER ABOUT THE "MOVIES IN HER HEAD", WHICH SHE DESCRIBED AS MUCH BETTER.

**ANNEXURE E:**

**22 EYE MOVEMENTS OF EMI**

