Research Thesis

Empathy in normal individuals and individuals who have experienced childhood maltreatment: A mixed methods investigation

Simon Locher

Lisa Barenblatt

University of Cape Town

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Supervisor: Pumla Gobodo-Madikizela

Co-supervisors: Melike Fourie

Abstract

Child maltreatment has been shown to lead to a diverse range of psychological disturbances. Although decreased empathy has often been included among these in the trauma literature, little research exists to prove this. In our review of the literature, we observed that the majority of factors that are required for the development of empathy are disrupted by childhood trauma. In this study, we investigated whether the phenomenon of empathy was expressed differently in normal individuals and individuals who have suffered childhood trauma. Participants were 38 individuals of diverse ethnicities and ages. We grouped participants into two groups based on scores obtained on the Childhood Trauma Questionnaire Short-Form, a 'normal' group ($n = 10$) and a 'trauma' group ($n = 28$). As part of a mixed methods design, empathy was assessed both qualitatively and quantitatively in response to highly emotionally evocative film footage taken from the Truth and Reconciliation Commission hearings of the *Guguletu Seven*. Qualitative and quantitative results both showed that empathy was less pronounced in the trauma group. On average, subjective self-report ratings of empathy were significantly greater in the normal group than the trauma group ($p < 0.05$), while the emotions anger and shame were higher in the trauma group. Thematic analysis of questionnaire responses confirmed this finding, showing that the trauma group displayed lower levels of empathy, higher levels of emotional distress, lower emotional inclination and awareness, and a malignant world-view. From these results we concluded that the experience of childhood maltreatment is associated with a decreased capacity for empathy, and that this low propensity towards empathy appears to be related to poor understanding of emotions, an unsympathetic view towards others, and emotional distress.

Introduction

Child maltreatment has been described as *soul murder* (Laub & Auerhahn, 1989). Child maltreatment is a relational trauma, and therefore fundamentally affects the nature of relationships (Bateson & Ahmad, 2009). A core element of relationships is empathy, the phenomenon that allows people to connect with one another. Chronic long-term child abuse destroys such connections, disrupting the development of the child's "sense of self in relation to others" (Herman, 1999, p.383). Although this implicitly suggests that impaired empathy is a consequence of maltreatment, there is little empirical evidence to support this claim. In this research we aimed to explore this overlooked area, to discover whether individuals who have suffered from childhood maltreatment differ in empathic responding from those who have not.

At the start of the year, we began work with a group of researchers in an empathy investigation that would include both qualitative and quantitative components. We were given much flexibility in determining the focus of our specific study. The overall aims of this investigation revolved around an examination of empathy and emotional responses evoked in participants by observing the distress of individuals shown in film clips taken from hearings of the Truth and Reconciliation Commission (TRC). These film clips showed disturbing footage where victims of politically sanctioned violence had to face the men who murdered their children. It included visuals showing intense emotional distress, as well as moments showing forgiveness, as well as a mother refusing to forgive the killer of her son (see appendix A).

Reading the literature describing the development of empathy, we began to see an interesting pattern emerge. We observed that many of the factors that are necessary for the development of empathy are impaired in children who suffer maltreatment; conversely, the symptoms of maltreatment represent the antithesis of those needed for the formation of a mature capacity to empathize with others. Although impaired empathy has often been stated in the context of child maltreatment (Kaufman & Zigler, 1987; Widom, 1989; Watt, 2007; Aber & Zigler, 1981), we found that there was little actual research that had investigated empathy in this group. Due to our interest in maltreatment, as well as the fact that impaired empathy appeared to be a central phenomenon in the lives of individuals who have suffered traumatic experiences (Laub & Auerhahn, 1989), we decided that the main aim of our investigation was to discover

whether individuals who have suffered from childhood maltreatment differ in empathic responding from individuals who have not suffered childhood maltreatment.

In addition to the general observation of decreased empathy in individuals who have suffered child maltreatment, many clinical disorders and syndromes that have childhood trauma as a major etiological factor often have impaired empathy as a symptom (Widom, 1989; James & Taylor, 2008; Mash & Wolfe, 2010). Empathy is a classical symptom of the cluster B personality disorders (implicitly and explicitly in the DSM-IV-TR (American Psychiatric Association, 2000)) as well as the syndrome of complex PTSD (Kaplan & Sadock, 1994; Paris, 1997; Hermann, 1999; Gelder, Mayou, & Cowen 2005). Hence, a similar mechanism, namely maltreatment could be the mechanism for the decreased empathy in these groups as well.

When considering the nature of these disorders, it appears clear that diminished empathy is intimately related to some of their other symptoms. For example, the poor emotion regulation typical of individuals diagnosed with cluster B personality disorders is related to difficulty identifying emotions in the self (James & Taylor, 2008). Researchers have argued that that emotion identification is a process that is at the core of empathy, as incorrect emotional identification in the self leads to the inability to accurately read the emotions of others (Singer, 2006).

Maltreatment and the disorders named above have many other commonalities which may relate to impaired empathy. Poor attachment styles with caregivers as children, poor emotion regulation, and the presence of negative schema of the self, others and the world in general are all common in this group (McCord, 1983; Herman, 1999; Heim & Nemeroff, 2001; James, & Taylor, 2008). As described below, these are highly interrelated with empathy.

We decided that a between group design, where we divided our participants into two groups that differed in levels of maltreatment, would be the most effective way of studying our hypothesis that empathy is impaired in individuals who have suffered child maltreatment. The methods we used as a group only had to be changed slightly to accommodate our investigation. We attempted to add some new methods to this investigation (demographic matching, randomization, inclusion and exclusion criteria, the IRI, a standardized and validated instrument to measure empathy, a quantitative scale for attachment, acquiring a larger sample for the quantitative component, and an interview component) which may have improved the validity of our results. However, this was not possible due to the fact that we were working in a large group

with diverse interests, and so only a few of these suggestions were permitted. Also, our current methods may have been better suited to this study due to its exploratory nature, as it allowed for broad trends to be discovered, and there are also many strengths of our methodology which enabled us to answer our research questions well.

Empathy

Empathy is a psychological quality that is at the heart of what is good about human nature. It enables us to understand one another, for the deep connections that people share, and for altruism (Preston & de Wall, 2002). Empathy is defined as a mental state that is elicited by another's emotional condition, with which it is isomorphic; additionally, while empathizing, the empathizer must be aware of the other person as the source of their mental state (De Vignemont, & Singer, 2006).

The process of empathy subsumes several different sub-processes. Bateson and Ahmad (2009) break empathy into four main components: the imagine-self perspective, which occurs when we imagine what we would feel like in another's position; the imagine-other perspective, which is when we try to assess what another is feeling given their situation; emotion matching, which is essentially synonymous with emotional contagion or affective synchrony; and empathic concern, which is the feeling of sympathy or compassion. These different subcomponents of empathy are highly interrelated with one another. For example, emotion matching, which is a phenomenon where a person mirrors the emotional state of another (for example, when walking into a bar where many people are laughing, one may become happy, when watching a person cry, we too may feel sad, etc.) may lead one to become sad when viewing someone crying. Once we are sad, their suffering is made personally salient to ourselves, leading to empathic concern or sympathy. The salience of their experience may then trigger the cognitive process of perspective-taking, where we imagine how we would feel in their situation, and also attempt to imagine how the person herself feels (Zahavi, 2008).

Recently, this interaction between the different subcomponents of empathy has been demonstrated by neuropsychological imaging scans. These have made inroads into our understanding of the neurophysiology of empathy (Singer, 2006). The first major breakthrough in this regard was the landmark discovery of the mirror neuron system (MNS) in monkeys (Rizolatti, Fadiga, Gallese, & Fogassi, 1996). Mirror neurons are found in the supplementary motor cortex (SMC) of apes and humans, comprising a system where perceived actions activate

the same pattern of activity that occurs when the same action is generated by the person herself. Solms and Turnbull (2002) have hypothesized that the MNS is the neurological basis of human empathy, although some believe that this only accounts for the emotion matching part of empathy (Singer, 2006). This is the most basic and automatic response that is part of empathy, being *inbuilt* into the human brain (Spinella, 2005). In addition, researchers have recently begun to find other specific brain areas involved in empathy (Abu-Akel, 2003). The phenomenon of empathy involves all of these different parts. Emotion matching activates the MNS in the SMC, which then leads to activation of other cortical areas like the prefrontal cortex where the individual processes thoughts about the mental state of another (Singer, Seymour, O'Doherty, Kaube, Dolan, & Frith, 2004; Kramer, Mohammadi, Donamayor, Samii, & Munte, 2010) Also connected to this system is the insular cortex, which leads feelings of the *embodiment*, where emotion is felt on a physical level (Parvisi & Damasio, 2001; Bosse, Jonker, & Treur, 2008)

As each facet of empathy is intimately bound to the others, and because activation of each component usually leads to activation of the others, in this study we conceptualize empathy in a global fashion, including all four components named above.

Childhood Trauma and Empathy

Family relations are the earliest, most important, and most enduring social relationships that affect a child's well-being and development (Mash & Wolfe, 2010). Although positive interactions with parents are critically important for the development of children, this is far from the reality of many children in South Africa and across the world. Childhood maltreatment is generally a chronic and unremitting problem, where, children grow up in an environment that fails to provide appropriate and consistent opportunities that guide development, which often leads to profound psychological difficulties (Oliver & Taylor, 1971).

Many of the pervasive developmental problems observed in such individuals may be related to changes in empathy. The ability to empathize is nurtured from infancy onwards, starting with positive attachment experiences with care-givers (Watt, 2007). In fact, the development of attachment is thought by some theorists to be a fundamental prerequisite for the ability of empathize with others. Watt (2007) has argued that empathy and attachment evolved simultaneously in mammals, as maternal attachment, which is essential for survival of newborn mammals, requires empathy. As such, secure attachment encourages the development of

empathy, as secure attachment may give rise to an internal working model where relationships are seen as nurturing and caring, and other people are seen as good and deserving of help (Hook, Watts, & Cockcroft, 2002). The nurturing experiences that are usually part of the upbringing of children with positive attachment may also lead to enhanced emotional development and affect regulation, which may also enhance empathy (Kaufman & Zigler, 1987). Most abused children have insecure or disorganized styles of attachment; this fact makes it likely that deficiencies in empathy will be common in this group (Sandberg, Suess, & Heaton, 2010).

Child maltreatment and trauma may also produce many other negative changes in the developing child that may impair the development of empathy. Abused children often develop hindered emotional development for various reasons (Mash & Wolfe, 2010). Having a parent empathically soothe a child's pain, which often occurs in the context of secure attachments, guide the child to understand how to feel in different situations, encourage the child to engage in mutual activities and to respond with sensitivity to others, and to empathically mirror their feelings, which are often absent in the lives of children with maltreatment, all help in the development of emotion regulation and identification (Hook et al., 2002). As described above, both of these have been suggested to be important for the development of empathy.

The experience of constantly living in fear has also been shown to lead to underlying physiological features that lead to hypersensitivity to emotional signals, as well as intense emotional states that are difficult to regulate (Heim & Nemeroff, 2001; Yehuda, 2002;). Also, the experience of living with constant psychological distress is also linked to the development of a repressive emotional style, which further impairs the development of understanding mental states (Zepf & Zepf, 2008). Such a repressive style would, in theory, hinder the experience of empathy, which involves opening one's self up to emotions. Finally, living with such distress often leads to individuals avoiding thinking about the mental states of abusers, as this provokes negative feelings of shame and fear. As the abuser is often central figures the child's life, this avoidance becomes central, leading to deficiencies in the quality of mentalization (thinking about other's mental states, which is similar to what is often called cognitive empathy) (Singer, 2006).

Psychodynamic theory offers much insight that helps explain impaired empathy resulting from the experience of maltreatment. From an object-relations perspective, child maltreatment may lead to a hostile world view through the development of a malevolent object world (Hook et al, 2002). This is characteristic of the early paranoid-schizoid stage of development, which is

characterized by splitting of good and bad objects and projection of bad objects in order to protect the internalized good object with which the person identifies (Zepf & Zepf, 2008). Due to this projection, the individual then experiences other people as menacing and malevolent. In addition, splitting leads to simplistic ways of understanding others, with vacillation between viewing others as "all good" or "all bad". Relationships are generally expected to be painful, threatening, and destructive for such individuals. This internal working model of social relations clearly does not foster empathy, through social isolation and mistrust of others in general (Mash & Wolfe, 2010). In addition, the simplistic understanding of others that results from splitting leads to poor emotion identification and an inability to understand the mental states of others (McLeod, 2003). So, deficiencies in empathic responding may therefore result from the effects of early traumatic experience on the individuals internal object world.

It should be noted at this point that childhood maltreatment is not a homogenous phenomenon, and it differs greatly between individuals due to many factors (Aber & Zigler, 1981). These include: the developmental timing of the maltreatment, the importance of the perpetrator of the abuse in the child's life, the chronicity of the maltreatment, and the resilience of the child (Mash & Wolfe, 2010). Also, the type of maltreatment is important. Therefore, there are many potential outcomes of childhood maltreatment. Because of the fact that no two people are the same in terms of the extent and form of abuse, or in terms of their resilience or extent of protective factors in their lives, we do not expect severity of maltreatment to correlate perfectly with empathy; rather, we will expect overall differences between the two groups we will study.

As empathy is theoretically related to all the features described above, we believe it is possible that impaired empathy may be a common denominator that is related to the different kinds of childhood maltreatment which occurs in the context of major disturbances in interpersonal relationships. This, as well as the fact that childhood maltreatment is so common and often leads to dire consequences, makes research investigating differences in empathy in this group highly significant. Consider the chain of violence that is often observed, where being a victim leads to becoming a perpetrator later in life (Kaufman & Zigler, 1987; McCord, 1983). Could diminished empathy be significant here? The discovery of psychological processes linked to diminished empathy could be important to attempt to prevent or counteract the development of impaired empathy in this group, and to develop new psychotherapeutic techniques to enhance empathy.

Theoretical Framework

In order to investigate our research question, we will use a mixed methods approach, combining quantitative and qualitative research methods. Philosophically, mixed methods research makes use of the pragmatic method and system (Johnson, & Onwuegbuzie, 2004). According to this method, the researcher must choose the combination of methods and procedures to best answer the research question. Johnson and Onwuegbuzie (2004) state that, "one can mix and match design components that offer the best chance of answering their specific research question." (p.15). It moves beyond the distinct epistemological positions that have traditionally differentiated qualitative and quantitative research. Pragmatism allows for practical exploration of aims, using the strengths of both forms of research and minimizing their weaknesses (Johnson & Christensen, 2004).

We will investigate the qualitative data from our research using thematic analysis. The fact that thematic analysis is theoretically and epistemologically flexible makes it an ideal method to use in a mixed methods research study. It is compatible with both realist and constructionist paradigms, although it is often espoused as a realist method (Braun & Clarke, 2006). As the themes that emerge using thematic analysis are fundamentally linked to the assumptions and positions of the researcher, it is important for researchers to be aware of these assumptions, and not take on a naïve realist position. The epistemological position we will use is that of contextualism. This position sits between the two poles of realism and constructivism (Cottingham, 1996). So, we will attempt to make sure we acknowledge that the ways that the broader social context influences the meanings of the experiences of participants. However, we also aim to maintain a realist perspective, where the responses of participants are assumed to reflect an underlying reality. So, we aimed to both to reflect reality as well as go beneath its surface.

Methods

Design

We used a mixed methods research design which incorporated both qualitative and quantitative components. We used a within-stage mixed-model design, where stages of data collection took place sequentially. We used a between-group design, using two groups, a

'maltreatment' group, and a 'normal' group, where groups were allocated according to scores on the CTQ-SF name it.

For the quantitative part utilized a 2 X 4 mixed repeated measures factorial design. The between groups independent variable is group allocation (maltreatment versus normal). The within groups independent variable is empathy target. These different targets were viewed on film clips that showed: victim showing forgiveness, victim not showing forgiveness, victim showing distress, and perpetrator showing no remorse. The dependent variables were subjective ratings of empathy and related emotions (anger, sadness, guilt, and shame) in response to the film clips.

The qualitative part of the study was done using questionnaires with questions based on film material taken from the TRC. The purpose of these questions was to explore the different ways participants empathically and emotionally engaged with the film material. Analysis of the answers was done using thematic analysis.

Participants

38 participants in total participated in the study. Participants were sourced from the general population through an advert placed in the *Tattler* newspaper. The advert stated that we were seeking individuals to participate in a TRC research study. Participants replied via email, and were remunerated with R90 for their participation. There were no selection criteria, and we selected all participants who arrived for the study. So, we used non-probability convenience sampling.

The maltreatment group was selected from the larger group by administering the Childhood Trauma Questionnaire Short-Form (CTQ). The sample was racially diverse (42.1% white, 23.7% black, 21% colored, and 7.8% Indian), with the majority being female (71.1%). Participants ranged in age, with 38.8% aged 20-25, 33.3% aged 30-40, and 27.7% over 40 years of age (see table 1).

Table 1

Numbers and percentages of participant demographics overall and across group membership

Gender / Race	Total	Normal group	Maltreatment group
	N (%)[a]	*N(%)*[b]	*N(%)*[c]
Male	27 (28.9)	2 (20)	9 (33.3)
Female	11 (71.1)	8 (80)	18 (66.7)
White	16 (42.1)	3 (30)	13 (48.1)
Black	9 (23.7)	2 (20)	7 (25.9)
Colored	8 (21)	2 (20)	6 (22.2)
Indian	3 (7.8)	1 (10)	2 (7.4)

Note. N: number of participants; a: percentage of total; b: percentage of normal group; c: percentage of maltreatment group

Measures

The emotions scale is a nine-point unipolar scale numbered 1 to 9 where participants indicated the level to which they felt empathy, anger, sadness, and guilt, with the scale labeled at three points 1 (not at all), 5 (somewhat/some), and 9 (very strongly/extremely). It was developed by our co-supervisor for this research (see appendix B). The qualitative questionnaire was developed by the primary investigator. The questionnaire consists of 13 questions asking about emotions to the video footage (see appendix C).

The empathy eliciting instrument was a film with footage from TRC hearings about the *Guguletu Seven*, which consisted of four short clips (1-2 minutes each) and one long clip (12 minutes), as described in the introduction.

The Childhood Trauma Questionnaire Short-Form (CTQ-SF) is a retrospective measure for the frequency and severity of different types of childhood abuse and neglect histories with 28-items each measuring the frequency with which different events took place when they "were growing up" where 0 = never and 5 = almost always (Bernstein & Fink, 1998) (see appendix D). It includes five subscales – physical neglect, emotional neglect, physical abuse, sexual abuse, and emotional abuse (five items each).

Maltreatment refers to five different but related acts, which correspond to these five subscales. The CTQ-SF defines these as: sexual abuse: "sexual contact or conduct between a child younger than 18 years of age and an adult or older person." Physical abuse: "bodily assaults on a child by an adult or older person that posed a risk of or resulted in injury." Emotional abuse:

"verbal assaults on a child's sense of worth or well-being or any humiliating or demeaning behavior directed toward a child by an adult or older person." Physical neglect: "the failure of caretakers to provide for a child's basic physical needs, including food, shelter, clothing, safety, and health care." Emotional neglect: "the failure of caretakers to meet children's basic emotional and psychological needs, including love, belonging, nurturance, and support" (Bernstein et al., 2003, p.175). We operationalized maltreatment according to these definitions in this study.

Guidelines have been established which classify each form of abuse and neglect into the following categories: none to minimal, low to moderate, moderate to severe, and severe to extreme. These were identified in a nonclinical sample, and successfully identify "cases" of abuse based on therapist interview ratings. The lowest level cut scores on each scale misidentify less than 20% of nonmaltreatment cases, and identify a high proportion of true cases (Bernstein et al., 2003). Those who scored at or above mild to moderate on at least two subscales, or moderate to severe or severe to extreme on at least one subscale of the CTQ were be selected for the maltreatment group. Reliability: retest reliability of this scale is good (.66 - .94); as is its alpha level (.70 -. 93) (Bernstein & Fink, 1998).

Procedure

We assessed three participants simultaneously in a small computer lab at UCT. Firstly, participants filled in an informed consent form (appendix E), after which we instructed them as to the procedure (appendix F). Each participant was seated in front of a computer and given headphones and answer booklets. PowerPoint presentations which contained contextual information about the TRC hearings were shown (appendix A).

After reading this, they then proceeded to view the four short clips on the computer. After each, they completed the scales provided for them in the booklet. Clips were shown in three different random sequences. After the final clip and scale were completed, participants viewed the longer clip. They then filled in and submitted their questionnaire online, or, if they preferred, on paper. They then completed the CTQ-SF.

Data Analysis

Empathy research has predominantly been of a quantitative nature (Watt, 2007), while our research includes a qualitative element to enable us to examine the quality of observed differences between our groups. One model used to integrate data in mixed methods research

incorporates a multi-stage data analysis process (Johnson & Onwuegbuzie, 2004), which were followed to greater or lesser extents in this study. During the stage of data reduction, we completed a thematic and statistical analysis. Data was then displayed in graphical form (e.g. graphs, tables). Data transformation was done for the qualitative data (quantitized), by conducting frequency counts of codes for each theme. During data correlation and comparison, which was done for the purposes of triangulation, we assessed our different sets of data (qualitative thematic analysis results, statistics, and quantitized ratios) for similarities, differences, and ways in which the one improve our understanding of the other. Although our analysis is mainly focused on differences or similarities between the normal and maltreatment groups, we also analyzed both the qualitative and quantitative results of each individual, in order to detect associations or differences between the two at an individual level. All this led us to the generation of an integrated set of overall findings. The discussion contains an interpretation of our integrated set of findings.

The use of mixed methodology allowed us to triangulate our results, for complementarity of our results, where results from one method were elaborated and enhanced by using data from the other sources (Willig, 2005), and for us to expand our findings in breadth and range. Add here about integration.

For our quantitative component, our null hypothesis was that there are no differences between the normal group and the maltreatment group for empathy, or the other related emotions. Our alternate hypothesis was that there are significant differences between the normal and maltreatment groups. Quantitative analysis was done using a mixed design ANOVA with repeated measures to test differences between our two groups, and within subjects to detect differences in response for the different empathy targets (forgiving mother, unforgiving mother, etc.). The dependent variable was mean scores for empathy and the related emotions. We performed correlations between total scores on the CTQ-SF and scores for the different emotions on each clip. We also calculated mean empathy scores for each clip in both genders and in four racial groups.

For the qualitative component, we analyzed the questionnaires and interview transcripts using thematic analysis. After reading and rereading the questionnaire answers several times, we coded the written material. Codes represented the smallest discernable units of information found in the data, which were groupings of words, phrases, sentences or paragraphs that cohered into

one idea or concept. These were usually emotions, states, beliefs, or opinions of the participants. Where codes were part of the same phenomenon, they were placed together in groupings of subthemes. Themes were then formed from the subthemes using principles of convergence and external divergence. Each theme had to fulfill these requirements, meaning that resulting themes included subthemes that were internally consistent, with related subthemes placed into one greater theme. After this process was completed, we then grouped together verbatim quotes from our data. We used this to check our analysis against our data. After this, we revised our themes somewhat, and connected together various themes that appeared to be more similar in nature than different. This process continued in a cyclical pattern until we were satisfied that our themes represented the data as best they could. Themes were then named and described, basing this on the data.

In general, we approached our analysis in an inductive fashion, where themes are directly linked to the data. However, as we were studying the phenomenon of empathy, it was important that codes and subthemes related to empathy were consistent with what the literature has shown is part of empathy. Therefore, the theme "empathy" was approached in a deductive fashion. This *theoretical* approach, where the "empathy" theme is related to major theories about empathy, means that this theme is aligned with the literature about empathy.

So, in summary, qualitative and quantitative data will be analyzed first separately and then compared to one another, in order to produce one coherent and integrated set of conclusions that relate to our research questions.

Results

Quantitative Results

CTQ-SF scores resulted in six participants with scores indicating no abuse on any of the five scales. Another four had scores of 'mild-moderate' on only one scale. These 10 participants formed the 'normal' group. The other 28 were grouped in the 'maltreatment' group. Scores of our sample indicated much higher rates of maltreatment than those reported on international samples (Paivio & Cramer, 2004). Physical neglect (47.4%), emotional neglect (52.6%), and emotional abuse (55.3%) all occurred at very high rates, while sexual abuse (33.5%) and physical abuse (26.3%) were also very common (table 2). Sexual and physical abuse both had the highest rates of severe to extreme cases (13.2% for both) (Table 3).

Table 2

Means, standard deviations, and prevalence of childhood maltreatment of our sample

CTQ-SF (C)	All participantss n = 38		
	M	*SD*	*P*
Sexual abuse (5)	8.00	3.09	33.5
Physical abuse (7)	9.82	4.08	26.3
Physical neglect (7)	10.68	4.45	47.4
Emotional abuse (8)	7.24	3.46	55.3
Emotional neglect (9)	7.03	4.05	52.6

*Note.*C: cut scores for "mild-moderate cases recommended by Bernstein and Fink (1998): *P*: percent of participants scoring above C.

Table 3

Numbers and percentages of participants falling in the CTQ-SF categories

Abuse type (C)	None M SD *N*	Mild-moderate	Moderate-severe	Severe-extreme
	N(%)	*N(%)*	*N*(%)	*N(%)*
Sexual abuse (5)	25 (66.5)	3 (7.9)	5 (13.2)	5 (13.2)
Physical abuse (7)	28 (73.7)	4 (10.5)	1 (2.6)	5 (13.2)
Physicalneglect (7)	20 (52.6)	7 (18.4)	8 (21)	3 (7.9)
Emotional abuse (8)	17 (44.7)	12 (31.6)	6 (15.8)	3 (7.9)
Emotional neglect (9)	18 (47.4)	12 (31.6)	6 (15.8)	2 (5.3)

*Note.*CTQ-SF: Childhood Trauma Scale-SF; C: cut scores for "mild-moderate cases recommended by Bernstein and Fink (1998); *N*: number of participant.

Two-way repeated measures ANOVAs with repeated measures on one factor were performed for empathy, sadness, anger, and shame. This is because we assessed the emotions using repeated measures, where we measured responses after a series of clips, and also wanted to assess between group effects (i.e. differences between the normal and maltreatment groups for each emotion). The assumptions of normality and homogeneity of variance were met. Mauchly's test indicated that the assumption of sphericity has been violated for type of clip on empathy, chi sq(5) = 19.937, $p < .001$ (epsilon=.707). Degrees of freedom were therefore corrected using the Greenhouse-Geisser estimates of sphericity.

There was a significant main effect of type of clips viewed on empathy ratings, $F(2.120; 74.194) = 85.457$, $p < .001$, partial eta squared=.709. There was also a significant main effect of

maltreatment group on empathy ratings suggesting that over all the clips, empathy ratings were greater in the normal group than the maltreatment group, $F(1, 35) = 4.55$, $p < .05$, eta squared=.561. Pairwise contrasts revealed that this difference in empathy between the groups was only significant at two clips, namely the forgiving mother (mean 7.40 vs 5.81, $p < .05$) and distressed mother clips (mean 8.80 vs 7.07, $p < .05$), while the unrepentant perpetrator clip showed markedly non-significant results ($p = .84$). Table 4 shows the mean empathy scores for each clip across the two groups. Underneath each table of descriptive statistics, for each emotion is a graph showing the differences between the normal (class 1, the blue line) and maltreatment (class 2, green line) groups across the four clips.

The numbers 1, 2, 3, and 4 represent the following clips:

1. forgiving mother
2. unforgiving mother
3. distressed mother
4. unrepentant perpetrator.

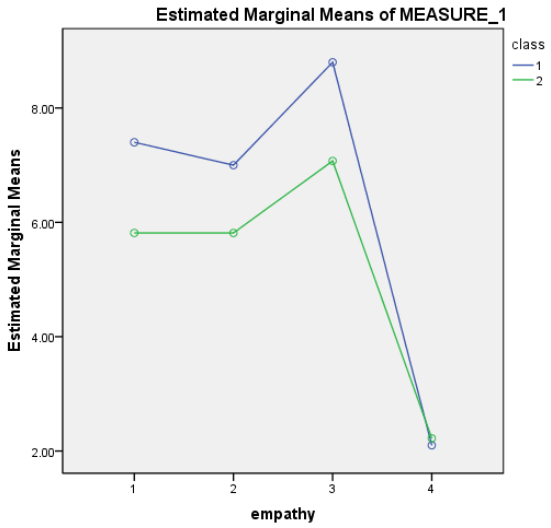
Table 4

Descriptive statistics for empathy

Clip	Normal group			Maltreatment group		
	N	*M*	*SD*	*N*	*M*	*SD*
Forgiving mother	10	7.40	1.26	27	5.81	2.25
Unforgiving mother	10	7.00	2.11	27	5.81	1.92
Distressed mother	10	8.80	.42	27	7.07	2.09
Unrepentant perpetrator	10	2.10	1.29	27	2.22	1.76

Note. N: number of participants; M: mean empathy score.

Figure 1. GROUP MEANS FOR EMPATHY



Note. Class 1 (normal group) revealed the pattern of increased empathy ratings across the four clips compared to class 2 (maltreatment group).

When the sample was broken down into different subgroups, each group followed the same general pattern, where all forgiving and distressed mother clips revealing greater mean empathy scores for the normal group, with differences of around two points on average. Sample sizes were too small for ANOVA results to be meaningful, so these results were not reported as probabilities (table 5).

Table 5

Mean empathy scores across gender and race

Group	Forgiving mother		Distressed mother	
	Normal group(M)	*Maltreatment group (M)*	*Normal group (M)*	*Maltreatment group (M)*
Male	7.50	4.89	9.00	6.00
Female	7.38	6.28	8.75	7.61
White	7.00	5.62	8.67	7.15
Black	8.00	6.43	9.00	7.00
Colored	7.67	5.57	9.00	7.00

Note.M: mean empathy scores.

As empathy was the main focus of our evaluation we did not analyze the other emotions to the same degree. Other emotions were all significant for the main effect of type of clip on emotion ratings, at a $p < 0.001$. This was unsurprising, and not of significant interest for our purposes. The main effects comparing emotion in the normal and maltreatment groups showed the following: sadness: $F(1, 34) = .411$, $p = .526$, anger: $F(1, 32) = .909$, $p = .348$, shame, $F(1, 32) = 1.798$, $p = .189$. Although all were nonsignificant, a general trend was apparent where sadness mirrored group differences in empathy, and anger and shame were greater in the maltreatment group across all clips. Since correlations were significant for anger and shame, it is likely that such differences are more pronounced at higher maltreatment levels. Tables 6-8 show the mean scores for each emotion at each clip for the normal and maltreatment groups.

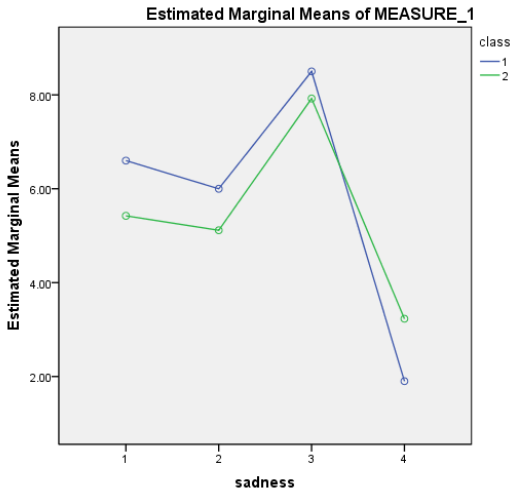
Table 6

Descriptive statistics for sadness

Clip	Normal group			Maltreatment group		
	N	*M*	*SD*	*N*	*M*	*SD*
Forgiving mother	10	6.60	1.96	26	5.42	2.47
Unforgiving mother	10	6.00	2.71	26	5.12	2.12
Distressed mother	10	8.50	.71	26	7.92	1.32
Unrepentant perpetrator	10	1.90	1.29	26	3.23	2.39

Note. N: number of participants; M: mean sadness score.

Figure 2. GROUP MEANS FOR SADNESS



Note. Class 1 (normal group) display increased ratings of sadness across all of the clips except for clip 4 (unrepentant perpetrator), in which class 2 (maltreatment group) experience increased sadness

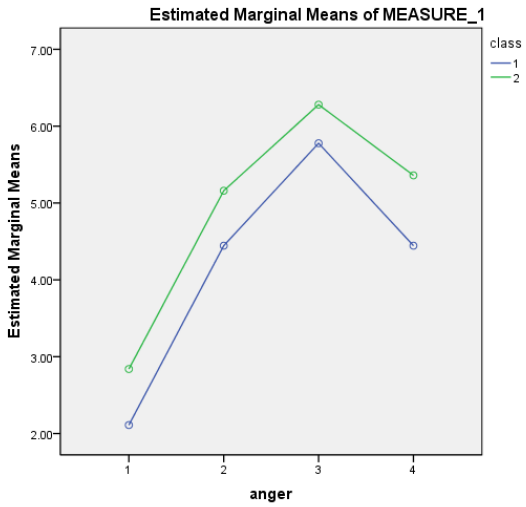
Table 7

Descriptive statistics for anger

Clip	Normal group			Maltreatment group		
	N	*M*	*SD*	*N*	*M*	*SD*
Forgiving mother	9	2.11	1.69	25	2.84	2.17
Unforgiving mother	9	4.44	2.40	25	5.16	2.62
Distressed mother	9	5.78	3.56	25	6.28	2.69
Unrepentant perpetrator	9	4.44	2.79	25	5.36	2.38

Note. N: number of participants; M: mean anger score.

Figure 3. GROUP MEANS FOR ANGER



Note. Class 2 (maltreatment group) reported greater levels of anger across all the clips compared to class 1(normal group)

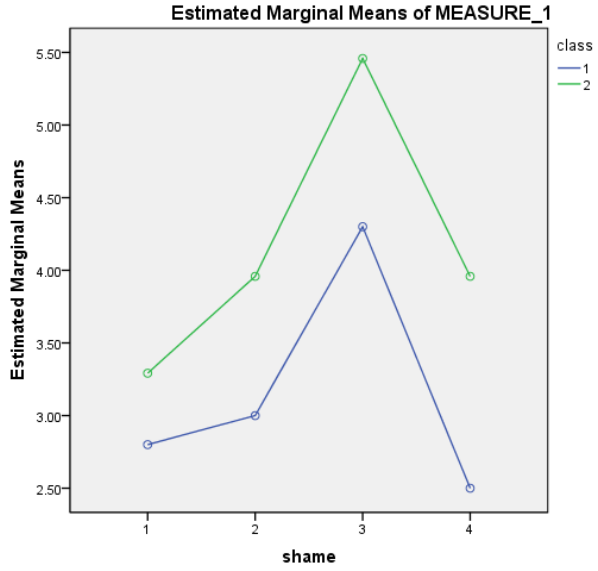
Table 8

Descriptive statistics for shame

Clip	Normal group			Maltreatment group		
	N	*M*	*SD*	*N*	*M*	*SD*
Forgiving mother	10	2.80	3.29	24	3.29	2.48
Unforgiving mother	10	3.00	2.31	24	3.96	2.49
Distressed mother	10	4.30	3.23	24	5.46	3.23
Unrepentant perpetrator	10	2.50	2.01	24	3.96	2.93

Note. N: number of participants; M: mean shame score.

Figure 4. GROUP MEANS FOR SHAME



Note. Class 2 (maltreatment group) reported greater levels of shame compared to class 1 (normal group)

Correlation analysis was done for anger and shame, we expected these to have a more linear relationship with trauma scores. Empathy and sadness did not correlate with CTQ-SF scores in a systematic fashion, despite group differences for empathy. Anger was significantly correlated with CTQ-SF scores for the forgiving mother ($r = .35$, $p < .05$), and the distressed mother clips ($r = .339$, $p < .05$), while shame was significantly correlated with CTQ-SF scores for the forgiving mother ($r = .396$, $p < .05$), unforgiving mother ($r = .324$, $p < .05$), and unrepentant perpetrator clips ($r = .391$, $r < .01$). Although main effects were not significant for anger, and shame for group differences, the fact that correlations were significant makes it is likely that such differences are more pronounced at higher maltreatment levels.

Table 9

Table of correlations

	CTQ-SF	Anger-F	Shame-F	Anger-U	Shame-U	Anger-D	Shame-D	Anger-U	Shame-U
CTQ-SF	1	.353*	.396*	.154	.324*	.339*	.267	.180	.391**
Anger forgiving		1	.320*	.462**	.257	.329*	.198	.303*	.391**
Shame forgiving			1	.034	.310*	-.005	.346*	-.201	.005
Anger unforgiving				1	.324*	.509**	.088	.543**	.406**
Shame unforgiving					1	.103	.525**	.269	.501**
Anger distress						1	.206	.408**	.504**
Shame distress							1	.193	.534**
Anger unremorseful								1	.339*
Shame unremorseful									1

*Note. *p < .05, **p < .01; F*: forgiving mother; *U*: unforgiving mother; *D*: distressed mother: *P*: unrepentant perpetrator.

Qualitative Results

Themes

We used a dual approach in the interpretation of our qualitative data. At times we used a semantic approach where the explicit or surface meanings of the data were used to construct codes with little attempt to infer deeper meanings. However, many of the sentiments expressed by the participants exist within and have been influenced by sociopolitical discourse around forgiveness, the accountability of perpetrators of politically sanctioned violence, and victimization. So, we also used an interpretive approach at times.

The importance of these influences is amplified by the fact that participants viewed footage from the TRC. The TRC endorsed forgiveness as a solution that allows injustices of the past to be overcome and as a way to allow for social groups that were previously in conflict to become reconciled. As part of this process, perpetrators who were open about their past actions and who showed remorse were favored, as were those who showed forgiveness to their past victimizers. This was a major influence that affected the views of South Africans. So, participants are viewing an event which may have served as an influence of their views at the same time that they are asked to give them, leading to the possibility that the attitudes of the TRC may be reinforced in participants. This makes semantic, unreflective interpretation hazardous.

Also of importance is the fact that many South Africans still have emotional scars from the past. Due to these reasons, it is often impossible to determine whether certain responses are

due to individual differences in empathy, or due to social, political, or experiential influences, which we remained aware of throughout. This caveat pertained mainly to statements made about forgiveness, punishment of perpetrators, and sympathy or lack of sympathy towards perpetrators. So, for example, the fact that any participant expresses forgiveness or the lack of forgiveness was not given any significance by itself. However, statements that qualified reasons for these feelings were used in determining the feeling state of the individual, as well as the general nature of their responses. Statements that showed an absence of understanding of the behavior of another that was based on cultural differences were also not judged unless they were part of a general pattern that was clearly unrelated to culture. So, an interpretive approach was used where responses were deemed to result from factors other than individual, internal factors (see summary of themes in table 10).

Theme 1: Empathy

Codes that were grouped into this theme (and the next) were coded independent of any coding frame. Once coding had been completed, it became evident that they could most conveniently be clustered into subthemes based on major theoretical ideas about the nature of empathy. The framework used by Bateson and Ahmad (2009) was adopted.

These subthemes show that empathy is divided into a set of separate but linked processes that can be distinguished from one another. Participants who displayed responses of a highly empathic nature tended to have examples of each of these, showing how all components come together in very high empathizers, who often showed much insight into the states and emotions of others. The subtheme of *imagine-self perspective* was shown where the participant imagined how they would feel if they were in the shoes of another person displayed in the footage. An example from our study shows this well: “I absolutely understood her need to know. In the face of such brutality, you have to know, especially if it is your loved one… I could relate.”

The *imagine-other perspective* pertains to the imagination of how another thinks or feels given their situation. As participants do not actually know the protagonists in the footage, and hence had no personal information for inferring a given persons emotional state, this ability would be somewhat curtailed. Therefore no judgment was made about the content of the inference, but only as to the extent to which the participant displays some kind of understanding about how another feels. For example: “Mbelo… did not cry or appear genuine during his apology… I felt sad that perhaps he no longer had the ability to feel, he was numb.” Also

consider: “I perceived him differently in that context with the mothers. I perceived him to be truly remorseful. I was heartened by his genuineness, the fact that he took responsibility.” Both of these are examples of the *imagine-other perspective*, yet one perceives Mbelo as ingenuine and remorseless, while the other sees him as remorseful. Both, however, show an attempt to feel their way into his mental state. Individuals who displayed proficiency in all the elements of empathy often showed a high level of insight related to this subtheme, for example, “her [the unforgiving mother] anger was so controlled… it was from a place of deep hatred, yet she hugged him on her way out after the interview. I found that strange and contradictory.”

Emotional contagion is where an individual feels the same emotion that they observe in another. This ‘emotion catching’ process is shown in statements like: “The despair of the mothers was heartbreaking, I cried uncontrollably, I empathized,” and, “Heartbreak was the first and strongest feeling at this point. This sad feeling eased once the mother forgave Mbelo.” Here, we see the participant being genuinely moved to tears by the sorrow of the mothers, or feeling peace and hope when the mother forgives.

Empathic concern was shown by statements that demonstrated sympathy and compassion towards the protagonists of the film footage. Here, the emotion is not necessarily felt, but it is felt *for*, as in, “seeing Mbelo’s face in response to the unforgiving mother. I felt deeply sorry for him as his expression was accepting of anything that the mothers may say. I felt respect for him and shame for the structures that put him in that situation… It must have taken [much] strength to do this.” Where an observation did not fit in to any of the above subthemes, but clearly showed good understanding of the mental state of another, it was also included in the ‘empathy’ theme.

Table 10

Summary of themes and subthemes

Theme number	*Theme*	*Subthemes*
1	**Empathy**	Imagine-self perspective; imagine-other perspective; emotional contagion; sympathy/concern; other display of understanding of mental state of another
2	**Impaired Empathy**	Self-involved, can only relate to own experiences; can’t understand others’ situation (together with an unforgiving attitude and a need to punish); detachment and absence of contagion; little sympathy and sadness; bizarre attribution of another’s behavior
3	**Positive world view**	Ability to forgive; sadness turned to joy and forgiveness; understanding of evil as human; sense of meaning
4	**Malignant world view**	Evil as bad or wrong and unforgivable; malignant world view; perpetrators as all bad; absence of meaning; vigilant for negative emotions
5	**Emotional distress**	High levels of anger; fear and horror during film; high levels of guilt and shame; ongoing symptoms of abuse; emotional distress (including physical manifestations)

6	**Emotional inclination and awareness positive**	High focus on emotional signals and emotions in self; rich understanding of emotions; good understanding of others' grief, suffering, state, or situation; understands evil as an inherent human ability
7	**Emotional inclination and awareness negative**	Little focus on emotion; shallow emotional understanding; intellectualizing and simple causal reasoning; poor understanding of others' state, grief, suffering, or situation; emotional blunting and lack of emotional response; bizarre or sever misattribution of another's feelings; emotional detachment; no emotional contagion

Theme 2: Impaired empathy

The first subtheme in this theme was defined by the absence of content from the empathy theme, while most of the others represented its opposites. The subtheme *poor understanding of another's situation, state, grief or suffering,* for example, is the opposite of the imagine-other perspective. Being *self-involved* was shown when a participant could not relate to the experiences of another, for example, "the thin mother… she diminished [herself] by using her body as an illustration." Here, the participant shows little empathy with this person because of her use of an idea that is foreign to her. *Poor understanding of others states*, etc, includes instances like the following: "I felt detached from the mother who screamed/performed in front of all the people. One doesn't have to 'perform' to show one's grief. I keep it inside." Here, the intense distress was misunderstood as 'performing' where it was, in fact, an experience of uncontrollable emotional pain in the mother. *Absence of emotional contagion* was marked by statements such as: "[I felt] very little as I'm not someone who experiences emotions easily. I felt a little sad but that's all," and, "I… feel a little detached because it hasn't affected me personally." The difficulty here is feeling emotions in response to the emotions of others. Participants with *absence of emotional contagion* had, in general, many other signs of impaired empathy. *Absence of sympathy* was shown by statements that showed a lack of concern for others in pain, like: "I didn't feel any pain personally…." Here, the intense emotional upheaval that was present in some was absent, and instead the participant remained unmoved and unconcerned. Finally, more extreme impairments in empathy were shown by *bizarre misattributions*, where the participant displayed strange misattributions of the emotions of a given protagonist, as in this example: "I felt anger when Mbelo was talking about staying drunk to mask pain. [It was] as though he was having a good time forgetting." In fact, the guilt-stricken Mbelo explained how he drank as a form of escapism to forget the unacceptable actions he had committed during the day.

This theme clustered together well, with poor empathizers often displaying a series of statements that covered the gamut of the theme. It must be remembered that the above statements

were often present in this context. On their own some may seem not to warrant a judgment of poor empathy, but where many such statements were juxtaposed, the pattern became clear.

Theme 3: Positive world view

This theme, as well as the rest, were extracted inductively but grouped together using an interpretive process. It is, with the next, perhaps the most loosely conceptually organized. It does however appear to show an overall general pattern, with subthemes connected by feelings of hope regarding life and a belief in the overall goodness of man. Part of this was the ability to forgive and respect for those who do forgive. For example, one participant wrote: "[When the] mothers offered forgiveness – I was amazed. I felt a sense of healing and an ability to move forward. Her wisdom and character made me feel she had done the right thing." Individuals who tended to forgive or respected forgiveness often felt an overall feeling of joy at the end of the film, where the mother's forgiveness transformed feelings of anguish and pain into joy, as in this statement: "[I felt] sadness turned to happiness and forgiveness – reconciliation." Linked to this nonjudgmental attitude was an *understanding of evil as a human phenomenon* rather than a sign of unforgivable aberrance, as shown by quotes such as, "Mbelo…was caught up in something that he did not have the strength or morality fight," "…there but for the grace of God go I…I felt huge shame and guilt that I could have been both the black or the white person." This person does not blame, but understands the power of situational influences. Finally, participants who displayed this theme often showed overall feelings of faith in the good of humanity, as in "I keep on being in awe with us humans, [with our] inner power and strength."

Theme 4: Malignant world view

This theme was evidenced by statements that are diametrically opposed to those of theme 3. Instead of respect for forgiveness, here we see statements such as: "I cheered her on [the unforgiving mother]… he didn't deserve forgiveness." Instead of hope, despair was the predominant sentiment here: "[my past experiences] Made me think that people can and will do anything to each other and sometimes there's nothing to do but be in pain." This quote also shows an absence of hope, with feelings that pain is perhaps an inescapable part of life. Associated with such remarks were statements showing distrust and fear of evil in others, and an attitude of perpetrators as 'all bad'. such as: "[Towards the two accused] I would scream and run away from them in fear. They have killed before and will again. Something is mentally wrong

with them." Feelings of evil as amoral, inhuman and unforgivable were shown by the following statements: "He has no humanity, you can't be human and think that a life taken can just be forgotten," and "I felt disgust at the white men implicated in these atrocities. I think they are a disgrace to the human race…." The sadness, pain, hopelessness, and defeat of such participants was often stated directly, as in: "I feel guilt, shame, and defeat for my situation and those on the video. Pity. Pity. Pity."

Theme 5: Emotional distress

The subthemes of this theme have in common the fact that they are all expressions of emotional distress. Examples included feelings of anger and hatred, for example "I experienced anger right in the beginning at [seeing] Bellingan's face. During the video my anger levels raised more and more." Often a preoccupation with punishment and revenge was present in this context, as in: "If I had to feel anger towards him, then I think I should have wanted him dead too." Participants with a strong tendency towards emotional distress often experienced feeling of horror, "Seeing the footage was heart-stopping… My brain was pounding, my breathing was heavier," and feelings of guilt and shame "I am feeling the guilt and shame that Bellingan and Mbelo should be feeling." In association with such feelings, perhaps as a result of the phenomenon of triggering, many participants described memories of personal trauma, like: "I have suspected for many years that I was sexually abused… as a result I have experienced times of emotion induced mania and more than one breakdown." Finally, somatic distress was a common feeling in response to the film footage in this group, for example: "I experienced… chills down my spine, felt as if my hair was being electrocuted…." This demonstrates the powerful negative emotions characteristic of the maltreatment group.

Theme 6: Emotional inclination and awareness (EIA) – positive

As suggested by the name, this theme was marked by a general proficiency in understanding emotional signals in others, identifying emotions in their selves, and a general focus on emotions when making sense of their experiences. As it is difficult to judge the accuracy of emotional attributions, we generally regarded participants as displaying this category whenever there was a specific focus on the emotional signals of others. The following quotes show this focus on emotional signals: "Bellingan disgusted me with his self-seeking remorseless attitude. The footage shows his face, his tight lips, his unflinching expression," and "I was

desperately searching [his face] for any hint of emotion or remorse, but I never found it." Other attempts at reflection about others' emotions, such as this, "Her anger was so controlled the more I thought about it," were also included here. Emotional self-understanding was also included, for example: "[My detachment from the mother in distress] was related not to the events unfolding in the court but rather my own issues." Finally, we included statements showing understanding of others emotional states here: "[The forgiving mother] I felt her battle was the hardest as she was in conflict between how she truly felt and what a transcendent moral code demanded of her,"; "Mbelo… did not have the strength or morality to fight,"; "I felt sad that he perhaps no longer had the ability to feel, he was numb."

Theme 7: Emotional inclination and awareness (EIA) – negative

This theme was evidenced by poor understanding of emotions and a general lack of focus on emotional signals and states. Individuals displaying this cluster of subthemes showed a remarkable absence of emotions, as in the following remark: "[I felt] no guilt or shame – [I was] not there at the time." In opposition to the keen insight of some, participants displaying this group of features at times showed marked absences of understanding of the states, situation, suffering, or grief of others. For example, one participant stated: "…Mbelo described smilingly how it was just another day on the job," referring to a scene where Mbelo was clearly ashamed. Together with this was often emotional blunting and lack of emotional response, as in the following remarks: "I didn't feel any pain personally…."; "I find it difficult to love and sometimes I can't [feel] sorry for other people,"; and "I feel a little detached because it hasn't affected me personally." Together with this we often observed avoidance of emotional feelings, for example: "I feel like I have experienced something shocking that I'm trying to push to the back of my mind," and an absence of emotional contagion. These quotes reflect difficulty dealing with distress, possibly leading to avoidance and denial.

General Associations of Themes and Patterns of Themes Between Groups

When we viewed that data on an individual level, we observed that there was an association between the themes of positive empathy and EIA, and themes of impaired empathy and negative EIA, and an absence of association between themes empathy and impaired empathy, and positive and negative EIA. Finally, there was a general pattern where individuals who showed presence of malignant world view and negative EIA showed little empathy, individuals

who showed either positive EIA or positive world view showed average empathy, and individuals who showed both of these were the highest empathizers.

We then divided participants into the two groups, and analyzed the themes across these groups. There were distinct differences between the groups. Themes of empathy, positive world view, and positive EIA were more prevalent in the 'normal' group, while themes impaired empathy, malignant world view, emotional distress, and negative EIA were more commonly observed in the 'maltreatment' group.

Although within the maltreatment group emotional distress and negative EIA occurred more frequently, they less frequently occurred concurrently on an individual level. Two typical response patterns associated with this merit further attention. Both had a pattern of negative EIA, poor empathy and high impaired empathy, but one was marked by the presence of high levels of emotional distress, while the other was marked by no signs emotional distress. So, although emotional distress did differ between groups, there was much more variation between participants here than with the other themes.

Quantitization of Qualitative Results and Links to Quantitative Results

We quantitized the qualitative differences between groups to allow us to triangulate our findings, and see areas of corroboration or inconsistency. This was done by conducting a frequency count for each theme in each group, and then comparing the average number of times codes comprising each theme occurred in one group to the average occurrence in the other. This is reported in the ratio scores below. Where codes were repeated, they were not scored to prevent large scores on subtheme due to repetition of the same emotion, for example. Frequency per person indicates how often each theme was evidenced per person. The results showed the following (see table 11):

Table 11

Frequencies of codes belonging to each theme per participant, and the ratio of codes from each theme across groups

Master Theme	Frequency per person (codes)	Ratio Normal:Maltreatment
Empathy	4	8 : 3
Impaired empathy	3	1 : 3
Positive world view	1.5	2 : 1
Malignant world view	1	1 : 3
Emotional distress	2	5 : 12
Emotional inclination and awareness +ve	1	3 : 1
Emotional inclination and awareness –ve	4	1 : 8

Note.[a] This was determined by calculating the overall number of times per participant that written material was deemed representative of one of the codes listed among each theme across the entire written responses. Repetitions of the same codes were not included.

The first observation that becomes clear is that this set of results confirms our subjective impressions in a more objective fashion, with a clear pattern emerging showing differences between the two groups. This quantitized data also has several points of overlap with our quantitative data. In both data sets, the normal group scored higher than the maltreatment group for empathy (8:3), with the maltreatment group also scoring higher in 'negative empathy' (3:1), which equated to low empathy scores. Above we saw how there was a general pattern where the maltreatment group experienced more anger and shame (nonsignificant mean difference but significant correlation coefficient). This finding is mirrored by the finding that the theme of emotional distress occurred more commonly in the maltreatment group.

While analyzing our quantitative data, we found evidence suggesting that individuals with high levels of maltreatment may in fact show greater empathy than individuals with moderate scores on the CTQ-SF (i.e. scored higher on subjective rating scale of empathy). This suggested that we may divide our sample into three groups, the third including individuals with extremely high scores on the CTQ-SF. However, during our qualitative analysis we found that this finding was not corroborated. In fact, in general individuals in this third group showed the least empathy. This difference did not generalize to the third group as a whole, and was present on in a minority of its participants, and was also seen in some individuals in what would have been the second group. Because of this, we decided against the division of the maltreatment group into a moderate and a severe subgroup, and retained one maltreatment group.

Discussion

The main focus of this study was to assess differences in empathy between normal individuals and those who have experienced childhood maltreatment. In terms of differences in empathy, our results were overwhelmingly unanimous. Our qualitative analysis showed large differences between the two groups, with the maltreatment group showing less empathy and more impaired empathy. Our quantitative results confirmed this finding. Despite the fact that we used a relatively small sample (at least by quantitative standards) this difference was quantitatively significant. In addition, this result was repeated no matter which group we assessed. Males, females, blacks, whites, coloreds, and Indians, all showed relatively large differences between the normal and maltreatment groups. This finding is striking, as the numbers of participants in each of these groups was often very few, so atypical case could easily change these mean values. The statistical chance of this being a random finding is extremely small, which leads us to believe that this result is a reflection of a true underlying difference between the groups. In addition our quantitative and qualitative analysis showed that there were large differences between the normal and maltreatment groups for all the different aspects of empathy, including features of cognitive empathy (imagine-self and imagine-other perspectives) and affective empathy (emotional contagion and empathic concern).

In this investigation, we chose specifically to investigate empathy in the context of other emotions. We believed that the footage and qualitative questions would elicit answers that would be related mostly to empathy and related emotions and states like anger, sadness, identification with victims, etc. Our qualitative results showed that we achieved this aim. In addition, however, we were struck by how many additional important themes emerged that were unforeseen. In the introduction, we described how the maltreatment literature contains many citations of factors common in individuals who have experienced childhood maltreatment that reflected the inverse of many factors cited in the empathy literature as important for the development of empathy. Some important examples of these included emotion identification, attachment, emotion regulation, positive internal working model of self and others. We had no intention of developing themes related to these theoretical constructs as, with the exception of the empathy and impaired empathy themes, all the themes were derived inductively, and guided by the data.

Once our analysis was complete, we were surprised at how highly related these themes were to these factors from the literature. One interpretation could be that these themes ‘emerged’

because they are intimately related to the phenomenon of empathy. Although this may be partly responsible, it appears more likely that these themes emerged due to the nature of the qualitative questionnaire as well as the footage that these questions were based on.

The questions asked directly about emotional reactions of participants, making it understandable that the emotional inclination of participants was a salient feature of their answers to the questionnaire. Although many of the themes that emerged are not directly linked to the questions, it appears that these were elicited by the footage. The mothers in the films were shown experiencing pain and loss that was unfairly inflicted upon them by a regime that had dehumanized their people. In the aftermath of this at the *Guguletu Seven* TRC hearings, one perpetrator was repentant, another blatantly not. One mother forgave and embraced the apologies of the killer of her son, while the other refused, despite the sociocultural and situational pressure exerted on her to express this sentiment. It is therefore unsurprising that emotional distress was evoked, or that the film elicited feelings about participants' internal systems of meanings.

Another explanation that may have contributed to the occurrence of these themes was the fact that in all forms of research the assumptions, views, and preconceptions of the researcher are intimately linked to what is discovered in the research (Parker, 2005). As such, we maintained a reflexive approach, where we attempted to not allow our previous knowledge to lead us to infer patterns where there were none. Although we attempted to remain aware of such preconceptions throughout the research process, our understanding of empathy and the psychological features which are associated with it could have directed our focus, most importantly during our qualitative analysis. To prevent interpretive bias, we felt it was imperative that we were blinded to group membership (i.e. whether participants belonged to either the normal or maltreatment group) until after the thematic analysis process was complete.

The appearance of these themes in relation to empathy does not mean that they are prerequisites or results of empathy. In fact, they could theoretically be unrelated to empathy. The fact that they differed between the groups suggests this possible relationship, but also does not necessarily imply one. Although this study was exploratory in nature, there are some basic relationships between our themes that are apparent in our results. In order to assess the relationship between the different themes, in our results we explored the patterns that emerged on an individual basis, as well as group differences. Based on this, some conclusions emerged, and findings from the literature were used to attempt to account for the dominant trends that emerged.

We found that empathy was highly related to emotional inclination and awareness (EIA), with the two covarying almost perfectly at an individual level. Negative EIA was the theme that differentiated the groups the most, occurring rarely in individuals in the normal group and extremely frequently in the maltreatment group.

The association between empathy and EIA is probably because part of empathy is the identification of emotions in one's self, which allows for the identification of emotions in others. This is consistent with the literature, where it has been often been argued that understanding of emotional states is a key requirement for empathy (Bateson & Ahmad, 2009). Our research showed that the experience of childhood maltreatment is associated with decreased EIA. As stated in the introduction, there are various possibilities that may account for this pattern. Maltreatment is associated with features such as poor mentalizing, poor emotion identification emotion understanding, and emotional blunting / detachment (McCord, 1983; Widom, 1989; Yehuda, 2002; Zepf & Zepf, 2008; Mash & Wolfe, 2010). These concepts are all intimately linked to the theme EIA. As our results show that decreased EIA is so closely linked to impaired empathy, we conclude that deficiencies in these may be part of the mechanism of decreased empathy in individuals who have suffered maltreatment.

We also found a strong relationship between positive world view and empathy, and between malignant world view and impaired empathy, as well as group differences. There are many instances in the literature that describe the effects of maltreatment on an individual's sense of self and the world (Hooke et al., 2002). In general, maltreatment may lead to feelings of the self as bad and unlovable, of others as threatening, hostile, and dangerous, and life as meaningless and full of pain and suffering. Where one has never been cared for or sympathized with, it becomes hard to care for or sympathize with others (Watt, 2007). This world view, which has been conceptualized often as an internal working model (Barlow & Durand, 2009), may also explain the lower capacity for empathy present in the maltreatment group. Individuals with such a cognitive style may have little concern for the suffering of others, as this has not been their experience. It has been argued that empathy is based on the valuing of another human being.

Only if we see another as having some value can we become concerned by their pain and moved by their suffering (Bateson & Ahmad, 2009). Many individuals in the maltreatment group displayed an absence of valuing of others. Where a mother forgave, she was described as weak; where she cried, she was seen as 'performing'; and where a perpetrator begged for forgiveness,

he was viewed as a cold-hearted liar. Here, we saw a pattern of narcissistic self-focus, paranoia about the motives of others, vigilance for malevolence everywhere, preoccupation with corruption, and a sense of resignation, that pain and suffering are expected and people must just deal with it. In the context of such responses, it is hardly surprising that this malignant world view, which was more likely to occur in the maltreatment group, was associated with low empathy.

In general, individuals with who displayed malignant world view to a pronounced degree in combination with the theme negative emotional inclination and awareness had the least empathy of all participants. The presence of these themes in conjunction appeared to have a multiplicative effect, where empathy was much more impaired than where only one of these themes was present in an individual.

Although emotional distress was present to a greater extent in the maltreatment group, this was linked to a lesser extent to empathy than the other themes. Some individuals with high levels of emotional distress had low empathy. Others, however, showed high levels of empathy. This is probably because emotional distress does not have a simple relationship with empathy. For example, emotional distress, as manifested in our study by anger, fear, horror, shame, and general distress, could be evidence of impaired emotion regulation. This has been linked to the experience of intolerable negative affect when faced with suffering and pain (Kaplan & Sadock, 1994; Heim & Nemeroff, 2001). Where suffering is intolerable, individuals may have a self-oriented focus, which detracts from the experience of others, leading to decreased empathy (Laub & Auerhahn, 1989). On the other hand, the experience of suffering elicited by that of another is often a key experience that leads to empathy for another (Preston & de Wall, 2002). Here, self-oriented suffering may lead to the experience of the other becoming more salient, which then leads to other-oriented focus, and therefore to empathy. This may be why this theme, although clearly related to maltreatment, may not always be related to poor empathy.

The emotional distress theme was also not always present in individuals in the maltreatment group. In fact, many individuals in this group displayed a pattern of low empathy, low EIA, and low emotional distress. This kind of ‘numbing’ was highly common in participant responses, showing that the absence of this theme was also often associated with low empathy. An opposite pattern to this was present relatively commonly in individuals with the highest scores on the CTQ-SF. So, where some individuals developed a numbing / detached emotional

style in reaction to childhood maltreatment, others developed the opposite pattern, where they were extremely emotionally reactive and easily distressed.

Some interesting related observations deserve further attention. These 'triggering' participants displayed high emotional distress, low EIA, and, as a group, by far the lowest degree of empathy based on the qualitative results, and yet had high scores on the subjective empathy scale (quantitative). So, although such individuals rate their own empathy as high, they display poor understanding of the mental states of others.

The observations made regarding this group has given us some insight into the scale that was used, and has led us to conclude that the subjective empathy rating scale is not tapping into all of the different parts of empathy. For almost all participants, the qualitative ratings of empathy that we made based on questionnaire answers were very similar to the subjective ratings on the quantitative scale. This group was an exception to this.

In order to understand what is being measured by the scale, one must put one's self into the situation of the participant. In response to a video clip, participants are asked to fill in, on a scale numbered from one to nine, the extent to which they feel empathy. For most participants, who are probably not familiar with the different theories and competing ideas about the nature of empathy, this probably equates to asking, "do you feel sympathy for the people shown here? Does their suffering make you sad, and do you feel sorry for them?" Their emotional distress is in all likelihood, similar to the phenomenon of emotional contagion, where they are experiencing the emotions of the individuals in the footage. And, assuming that they feel genuine sympathy, what they are actually rating is their level of affective empathy.

This helps explain the third group phenomenon. Here, individuals have a history of extreme chronic childhood maltreatment, and may feel intense distress when watching the clips. It is likely that despite the absence of a good understanding of the mental states of the characters in the footage, which is the hallmark of poor cognitive empathy, they do experience affective empathy.

Indeed, it does seem unlikely that the scale could measure cognitive empathy. Cognitive empathy implies a highly developed ability to understand others (Zahavi, 2008). In the absence of direct confirmation about the accuracy or inaccuracy of the attributions made about another's emotions, it is not possible for participants to accurately rate this in themselves. Hence, is appears that this scale is tapping into affective empathy to a greater extent than cognitive empathy.

Finally, since anger and shame were part of the theme of emotional distress (which was displayed more commonly by the maltreatment group), and the quantitative ratings of anger and shame were higher in the maltreatment group, it is likely these are, at least partly, measuring the same thing. Also, the correlations between CTQ-SF scores and anger and shame were in many instances significant, which seems to be corroborating the result that the third group (severe maltreatment) had the greatest levels of emotional distress. Emotional distress *on its own* is unlikely to be linked to deficiencies in affective empathy but appears linked, at least in some situations, to impaired cognitive empathy. So, affective empathy may be the most resistant form of empathy. This is corresponds to the observations made by Rizolatti et al. (1996), who argue that the mirror neuron system, which they believe is the basis for empathy, acts in an automatic fashion, where the observation of the state of the other produces an internal representation of that state in the observer.

On a theoretical level, it has been argued that reduced mentalization is often present in individuals who experience prolonged maltreatment, possibly because thinking about the mental state of a dangerous caregiver could lead to feelings of distress and fear (Mash & Wolfe, 2009). This leads to an absence of development of mentalizing, which is an essential part of cognitive empathy. There is some suggestion here that different parts of empathy can be affected to a different extent in individuals who have experienced maltreatment.

In summary, our research has shown that empathy is impaired in individuals who have experienced childhood maltreatment. The absence of emotional inclination and awareness and the presence of a malignant world view are likely to be factors that contribute to deceased empathy in individuals who have experienced maltreatment. Among individuals who have experienced maltreatment, those who experience emotional blunting, with decreased EIA and emotional distress appear to have the worst deficits in empathy. Those who experience high levels of distress (with decreased EIA) appear to experience decreased cognitive empathy rather than decreased affective empathy. Empathy appears to be an emotion that is central to all the other emotions. It is facilitated by a rich understanding of emotions in the self and in others, a trust in the goodness of others, feelings of worth, and a sense of meaningfulness, and an ability to control and regulate one's own feelings. All of these are disrupted by the experience of chronic childhood maltreatment, making the experience of maltreatment debilitating to the development of empathy.

Criticisms and Directions for Future Research

The methodology we used in this investigation was designed to meet the interests of a range of different individuals, some with a qualitative research orientation, some quantitative. As the overall framework was intended to be qualitative, many of the shortcomings of this research arise from its quantitative element, especially in terms of the validity and generalizability of our results. However, many of these criticisms are also applicable to the qualitative components of our study.

As we mentioned above, our empathy scale may not be measuring all elements of empathy. In future research, empathy could be divided into various subcomponents, such as sympathy / compassion, the extent to which participants feel the same emotion of the protagonist. Participants could also be asked to describe what their understanding of a certain targets emotional state is. As we saw evidence that certain groups of participants may have different impairments of different parts of empathy, this would be important. Another option in this regard would be to use standardized and validated empathy scales such as the Empathy Quotient or the Internal Reactivity Index, which are known to differentiate between high and low empathizers.

Another limitation was that our empathy and maltreatment groups were relatively small as well as unmatched, making comparisons between groups difficult. As groups were only differentiated based on CTQ-SF scores, there may have been systematic differences between the groups. For example, childhood maltreatment could be associated with, for example, poverty, which cold in turn be associated with developmental impairments, creating alternative explanations for group differences in empathy. In future research, a randomized sampling method would be recommended, with groups matched for important third variables (e.g gender, as males, in general, have less empathy than females, groups should be matched for gender. Our groups differed to some extent in terms of gender ratios). Another third variable could be attachment, which Sandberg et al. have shown to have a mediating effect on the outcomes of maltreatment. It is likely that the normal and maltreatment groups would differ in terms of attachment, and as attachment is well recognized as a key mediator in the development of empathy. Our sample was also small by quantitative standards; future research could include greater numbers. Maltreatment groups could also be constructed where participants were divided by type of maltreatment, as some evidence suggests different forms of maltreatment may have different effects (Mashe & Wolfe, 2009).

The film which was designed as an empathy eliciting instrument showed footage of perpetrators of political violence appealing for amnesty at the TRC, and confronting the mothers of men who they murdered. The fact that, in the wake of the TRC, there are various sociopolitical discourses around the desirability of forgiveness, as well as that many individuals in South Africa still bear the burden from past racial discrimination, it is difficult to say whether differences in empathy, forgiveness, compassion, etc, are related to genuine understanding of the situation of another. They could, alternatively, be due to conforming to social norms, where participants are motivated to display socially desirable sentiments. As such, the target should be of a politically neutral nature in future research, and, perhaps a social desirability scale could be included, as empathy is a socially desirable quality.

Another issue is whether our sample is representative of the greater population. As participants responded to an advertisement which stated we were conducting a 'TRC research project', we could have attracted participants who had an interest for the TRC, or who were sensitized to the plight of others (and therefore more empathic to suffering) who had suffered abuse because of personal abuse. Perhaps this accounted for the high rate of maltreatment in our sample.

Finally, the questions which participants responded to were somewhat peripheral to empathy. Future research could include questions related to what is known about the nature of empathy to create a greater focus on the phenomenon of empathy.

It should be remembered that our study was of an exploratory nature, and was designed to discover general trends. We did not intend to conduct an experimental study. The fact that our method was not focused exclusively on empathy allowed us to discover other important factors that are associated with empathy, which may relate to the potential mechanism of differences in empathy. Future research could also focus on the interrelationship between these variables and empathy. Future research with an exploratory focus, perhaps using interviews (which would be less restrictive on participant responses), would also help us to discover other broad trends.

Conclusion

Despite the absence of research into the matter, there are countless instances in the literature where impaired empathy is alluded to in discussions of the psychological consequences of maltreatment. Our research was inspired by the observation that many of the factors that have been discussed in the literature as precursors to the development of empathy are impaired in

individuals who have experienced maltreatment. It has provided empirical basis for these theoretical observations, and shown that empathy is impaired in individuals who have experienced maltreatment. Surprisingly for us, many of the factors which we theorized as the mechanism for this impairment, namely, malignant world view, impaired emotional inclination and awareness, and emotional distress, were also manifested in the context of impaired empathy. Our mixed methods approach provided corroboration for many of our observations, where the observations from one method often shed light on the nature of those of the other. We have seen in this investigation some evidence of the constellation of psychological consequences that are so common in individuals who have suffered childhood maltreatment, which is unfortunately extremely common both locally as well as internationally. Impaired empathy seems not only to lie at the heart of this unfortunate collection of symptoms, but to be its culmination. As the psychological consequences of maltreatment accumulate, so does the impairment in empathy. Once empathy is lost, individuals respond to suffering and distress in a manner that appears inhuman, making impaired empathy the final insult leading to the murdered soul that is so often evident in maltreatment.

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Appendix A

The following was presented in a powerpoint presentation:

The Story of the killing of the Gugulethu 7

Background history

The mid 1980a to early 1990a in SA was dominated by political violence. Large scale violent repression in black townships by state security police and SA Defence Force (SADF) on the one hand, and on the other, violence that wreaked havoc through bombing operations conducted by the Anti-Aparthied movement.

In 1986, seven young black men from Gugulethu Township were brutally killed by security police of Apartheid government.

The violence somehow subsided following the release of Nelson Mandela in 1991, and political negotiations in 1993. When Aparthied collapsed, the Truth and Reconciliation Commission (TRC) was formed. One of the goals of the TRC was to hold public hearings to review amnesty applications by those who had perpetrated violence on both sides of the political conflict.

The most important criterion for review of amnesty applicants was that applicants must fully disclose the truth of their involvement in politically motivated crimes. The 'conditional amnesty' of the TRC was very unique in the world, and necessary in SA for the reconciliation process.

TRC Amnesty

The killers in the examples of violence mentioned earlier, i.e., the police officers involved in the murder of the seven men from Gugulethu applied for amnesty under the provisions of the TRC.

The Story of the Gugulethu 7

The video clips you are about to watch are from the TRC public hearings of the amnesty application in the case of the operation in which the seven men from Gugulethu Township were killed.

The amnesty applicants are a black and white police officer. The white police officer, Captain Bellingan was the commander of the operation. The black applicant, Mr. Mbelo was a police collaborator who infiltrated the township pretending to be an anti-apartheid activist.

Bellingan and Mbelo tell two very different stories about their involvement in the killings of seven men on Gugulethu Township; however…

…the investigation by the TRC revealed the truth that lay hidden behind it all.

Bellingan and Mbelo were part of a black and white death squad from Vlakplass, a farm just outside Pretoria. Vlakplaas was a state-funded covert operations farm from which assassinations and massacres of antiapartheid activists were planned.

The black officer, Mbelo was sent to Cape Town to identify a group of young men and train them under the pretext that they were going to become soldiers of the antiapartheid struggle.

Mbelo supplied the youngsters with guns from the covert operations unit in Vlakplaas. He then lured them to a trap where Bellingan and an army of police were waiting to kill them.

> The police shot their own video footage of the killing. The film was duly presented to the press and the operation charaterised as a huge success of the Apartheid campaign against terrorists.

The mothers of the seven men heard about the killing of their sons for the first time on TV. During the inquest that followed, they were themselves subjected to interrogation and ill-treatment by the state officials.

The TRC public hearings of Bellingan and Mbelo's amnesty application was the first time in 10 years that the mothers of the 7 victims heard the truth about what happened to their sons. The video clips you will see are scenes drawn from that TRC public hearing.

Appendix B1

Participant's code	**0**	**0**		

Station 1: Clip 1 Forgiving mother

The following questions refer to how you felt *while* watching the video clip.

Not at all/none	**Somewhat/some**	**Very Strongly/extremely**
1--------2--------3--------4--------5--------6--------7--------8--------9		

Using the scale above, please indicate the greatest amount of EACH emotion you experienced while watching the preceding video clip. Please circle:

Sadness 1-------2-------3-------4-------5-------6-------7------8----9

Empathy 1-------2-------3-------4-------5-------6-------7------8----9

Anger 1-------2-------3-------4-------5-------6-------7------8----9

Pride 1-------2-------3-------4-------5-------6-------7------8----9

Shame 1-------2-------3-------4-------5-------6-------7------8----9

Other? YES/NO. Please specify. _____

Appendix B2

Participant's code	**0**	**0**		

Station 2: Unforgiving Mother

The following questions refer to how you felt *while* watching the video clip.

Not at all/none	**Somewhat/some**	**Very Strongly/extremely**
1--------2--------3--------4--------5--------6--------7--------8--------9		

Using the scale above, please indicate the greatest amount of EACH emotion you experienced while watching the preceding video clip. Please circle:

Sadness 1-------2-------3-------4-------5-------6-------7------8----9

Empathy 1-------2-------3-------4-------5-------6-------7------8----9

Anger 1-------2-------3-------4-------5-------6-------7------8----9

Pride 1-------2-------3-------4-------5-------6-------7------8----9

Shame 1-------2-------3-------4-------5-------6-------7------8----9

Other? YES/NO. Please specify. _____

Appendix B3

Participant's code	**0**	**0**		

Station 3: Distressed Mother

The following questions refer to how you felt *while* watching the video clip.

Not at all/none	**Somewhat/some**	**Very Strongly/extremely**
1--------2--------3--------4--------5--------6--------7--------8--------9		

Using the scale above, please indicate the greatest amount of EACH emotion you experienced while watching the preceding video clip. Please circle:

Sadness 1-------2-------3-------4-------5-------6-------7------8----9

Empathy 1-------2-------3-------4-------5-------6-------7------8----9

Anger 1-------2-------3-------4-------5-------6-------7------8----9

Pride 1-------2-------3-------4-------5-------6-------7------8----9

Shame 1-------2-------3-------4-------5-------6-------7------8----9

Other? YES/NO. Please specify. _____

Appendix B4

Participant's code	**0**	**0**		

Station 4: Unrepentant Perpetrator (Bellingan)

The following questions refer to how you felt *while* watching the video clip.

Not at all/none	**Somewhat/some**	**Very Strongly/extremely**
1--------2--------3--------4--------5--------6--------7--------8--------9		

Using the scale above, please indicate the greatest amount of EACH emotion you experienced while watching the preceding video clip. Please circle:

Sadness 1-------2-------3-------4-------5-------6-------7------8----9

Empathy 1-------2-------3-------4-------5-------6-------7------8----9

Anger 1-------2-------3-------4-------5-------6-------7------8----9

Pride 1-------2-------3-------4-------5-------6-------7------8----9

Shame 1-------2-------3-------4-------5-------6-------7------8----9

Other? YES/NO. Please specify. _____

Appendix C

Participant's Code:

O	**O**		

Participant's Background Information

1. Your gender: M ☐ F ☐

2. Your age: 25-30 ☐ 31-35 ☐ 36-40 ☐ 40+ ☐

3. Your ethnicity: _____

4. Your nationality: _____

Responses to Video: Please provide as much detail as possible.

4. What word/s would best describe your overall feeling after watching the video clip?

_____

5. What moment in the video clip, or what aspects of the video clip, evoked the strongest emotions in you? Describe your emotional reaction to this particular moment or moments in the video in detail.

6. The video clip may have triggered a visceral reaction, such as a sharp pain in the stomach, a sharp pain in the head, a choking feeling in your throat, tears, etc. If your response to the video clip triggered a reaction expressed **through your body**, give a detailed description of this reaction.

7. Was there any point in the video clip when you experienced uncomfortable feelings (such as guilt or shame)? What do you understand as the reason for these uncomfortable feelings?

8. Did you experience feelings of anger when you were watching the video clip? If your answer is yes, describe the moment in the video when you experienced anger, and explain your understanding of the reason for these feelings.

9. Do the events in the video trigger any particular memory or memories in your own personal life? Please provide details.

10. You may have felt a strong **emotional detachment** from one or more of the people in the video. If you felt a strong emotional detachment from any person in the video clip, please describe the relevant moment in the video that led to this feeling of detachment.

11. You may have found yourself connecting or identifying with one or more of the people in the video. If you felt a strong emotional connection with any person in the video clip, please describe the relevant moment in the video that led to this feeling of emotional connection, and describe the emotions you experienced in detail.

12. As you come to the end of this questionnaire, describe how you feel now compared to how you felt when you watched the video material. If your reaction to the video clips included a visceral reaction, please specify whether you still feel the bodily reaction triggered by the video clips.

13. Have you had experience/s of psychological trauma in your adult life, such as physical or sexual abuse, or witnessing extreme violence?

Circle one: **YES** **NO**

14. Has this experience affected you? If yes, can you describe in what ways you were affected?

PSYCHOLOGICAL COUNSELLING:

If you need psychological counselling, we will arrange an appointment for you with a professional counsellor at the Student Wellness Centre.

YES, I NEED PROFESSIONAL COUNSELLING ☐

NO, I DO NOT NEED COUNSELLING ☐

Patient Name					Week		Visit		Date	DD	MMM	YYYY

Childhood Trauma Questionnaire – Short Form (CTQ-SF)

Appendix D

Instructions: These questions ask about some of your experiences growing up **as a child and a teenager**. For each question, circle the number that best describes how you feel. Although some of these questions are of a personal nature, please try to answer as honestly as you can. Your answers will be kept confidential.

When I was growing up, …	Never True	Rarely True	Sometimes True	Often True	Very Often True
1. I didn't have enough to eat.	1	2	3	4	5
2. I knew there was someone to take care of me and protect me	1	2	3	4	5
3. People in my family called me things like "stupid", "lazy", or "ugly".	1	2	3	4	5
4. My parents were too drunk or high to take care of me.	1	2	3	4	5
5. There was someone in my family who helped me feel important or special.	1	2	3	4	5
6. I had to wear dirty clothes.	1	2	3	4	5
7. I felt loved.	1	2	3	4	5
8. I thought that my parents wished I had never been born.	1	2	3	4	5

9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.	**1**	**2**	**3**	**4**	**5**
10. There was nothing I wanted to change about my family.	**1**	**2**	**3**	**4**	**5**
11. People in my family hit me so hard that it left bruises or marks.	**1**	**2**	**3**	**4**	**5**
12. I was punished with a belt, a board, a cord, or some hard object.	**1**	**2**	**3**	**4**	**5**
13. People in my family looked out for each other.	**1**	**2**	**3**	**4**	**5**
14. People in my family said hurtful or insulting things to me.	**1**	**2**	**3**	**4**	**5**
15. I believe that I was physically abused.	**1**	**2**	**3**	**4**	**5**
16. I had the perfect childhood.	**1**	**2**	**3**	**4**	**5**
17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbour, or doctor.	**1**	**2**	**3**	**4**	**5**
18. I felt that someone in my family hated me.	**1**	**2**	**3**	**4**	**5**
19. People in my family felt close to each other.	**1**	**2**	**3**	**4**	**5**
20. Someone tried to touch me in a sexual way, or tried to make me touch them.	**1**	**2**	**3**	**4**	**5**
21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them.	**1**	**2**	**3**	**4**	**5**
22. I had the best family in the world.	**1**	**2**	**3**	**4**	**5**
23. Someone tried to make me do sexual things or make me watch sexual things.	**1**	**2**	**3**	**4**	**5**
24. Someone molested me.	**1**	**2**	**3**	**4**	**5**
25. I believe that I was emotionally abused.	**1**	**2**	**3**	**4**	**5**
26. There was someone to take me to the doctor if I needed it.	**1**	**2**	**3**	**4**	**5**
27. I believe that I was sexually abused	**1**	**2**	**3**	**4**	**5**
28. My family was a source of strength and support.	**1**	**2**	**3**	**4**	**5**

Appendix E

Informed Consent Form for Honours Research Project

Title of Study:

Exploring the Phenomenon of Empathy: A Dialogue between

Psychoanalysis and Neuroscience.

Principal Investigator: Pumla Gobodo-Madikizela

Other Investigators: Mark Solms; Dan Stein; Dave Edwards; Melike Fourie; Jenine

Smith; Simon Locher; Lisa Barenblatt.

Department & Institution: Department of Psychology, University of Cape Town

Introduction

This is one of the Honours research projects in the Psychology Department. You are one of 60 participants selected for this study either through the Psychology Department's SRPP programme or through a newspaper advertisement. Please read the information that follows below carefully.

Participation and Withdrawal

Your participation in this study is voluntary; however, if at any stage of the study you

feel you are unable to continue, you are free to withdraw from it at any stage.

Purpose of this Research Study

This study will examine the different patterns of emotional responses that are evoked by watching aspects of the Truth and Reconciliation Commission (TRC) process. We want to assess the multifaceted ways in which emotions are expressed by different participants in the study.

Procedures

If you volunteer in this study, you will be shown a short video clip from the Truth and

Reconciliation Commission (TRC) process. You will then be required to respond to

specific questions that concern the various emotions you experienced when you watched the TRC video material.

Possible Risks or Benefits

Some of the stories recounted at the TRC involved witnesses expressing their pain and the suffering they endured in the past. Watching these kinds of stories may lead to feelings of distress in some participants. Arrangements have been made to deal with this outcome in two ways. Firstly, two group meetings will be scheduled for those participants who wish to be part of a group to share their experiences of the video clips. The Principal Investigator, Pumla Gobodo-Madikizela, and one of the co-investigators,2 Professor Dave Edwards, will facilitate these group meetings. Secondly, if participants wish to be seen individually for professional counselling, arrangements will be made for them to be seen by a counsellor at the Student Wellness Centre.

Confidentiality

Your identity in this study will be protected. You are not required to disclose your name in any of the questionnaires. The responses you give to specific questions may be seen by the Psychology Department's Ethics Review Committee and may be published in journal articles and elsewhere without giving your name or disclosing your identity.

Available Sources of Information

If you have any further questions you may contact the Principal Investigator (Pumla

Gobodo-Madikizela), at 021 650 3427, and fax 086 6896912.

AUTHORISATION

I have read and understand this consent form, and I would like to participate in this

research study.

Participant's Name: _____

Signature :_____

Date: _____

Name of Principal Investigator, Co-Investigator, or Researcher :

Signature: _____

Date: _____

Appendix F

Instructions

All information disclosed during this research will be kept strictly **confidential.** There will be no link between individual participants and information disclosed in the research documents produced. Names will only be used for follow-up purposes.

- Please fill in the informed consent form provided.
- Ensure that your cell phones are switched off at all times, and that you do not speak to any of the other participants during your participation.
- You have been provided with a booklet containing all the relevant forms that you are required to fill in. Please fill in your gender, age, ethnicity and nationality now.

- The sequence of events for your participation is as follows:
    1. First you shall view a brief PowerPoint presentation to contextualize the film clips that will be shown.
    2. Please attach the headphones provided.
    3. You will then view 4 short clips. After each clip, you shall fill in a sheet in the booklet where you will rate your reactions. Please fill in a different form after each clip. Note: **press play** to start the first clip. When the navy screen appears after the clip**, press pause** and fill in the scale. When you are ready to continue, click play again to start the next clip, and repeat this until the clips are finished.
    4. After these short clips, you will view a longer clip of approximately 12 minutes. After this, you are required to fill in the questionnaire provided. Please respond in a detailed and comprehensive manner.

- If you have any problems with the procedure, or do not understand what is required, please ask one of the researchers for help.
- Please note: answer **all** the questions in as much detail as possible and provide reasons for your answers.
- Once you are finished, please hand in the completed forms to the research assistants, and then proceed to the tea room. **Tea** will be served afterwards. Here, you may discuss anything regarding your participation with the researchers.