Individual and Social Transformations:

Growth and Reconciliation in Rwanda

by

Jobb Arnold

Honours B.A. Psychology, Lakehead University 2005

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS OF THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

(Psychology)

THE UNIVERSITY OF BRITISH COLUMBIA

SEPTEMBER 2007

Abstract

Rwanda has changed drastically since the 1994 genocide; however, the long-term effects of the experiences on individual Rwandans remain unclear. As the country continues to move toward the reconciliation of Hutu and Tutsi ethnic groups, there are concerns that old animosities, lingering malice and the sheer scale of trauma inflicted upon this nation may be too much for this social process to succeed. The present sample consisted of 43 Rwandan university students. Study 1 investigated the effects of individual level trauma and sense of coherence (SOC) on psychological growth and attitudes toward reconciliation. There were main effects of trauma and SOC as well as an interaction between the two which predicted post-traumatic growth (as indicated by self-reported positive personal transformations; e.g. spiritual meaning, personal relationship and life priorities; Almedom, 2005; Antonovsky, 1987). Psychological growth predicted greater openness to reconciliation extending previous findings that link trauma symptoms to less openness to reconciliation (Pham et al., 2004). Results also showed that disclosing one's story following the genocide reduced its negative impact years later. This provides cross-cultural corroboration with past research with Holocaust survivors and provides further evidence contrary to notions of survivor guilt (Cassel & Suedfeld, 2006; Eitinger, 1964). Study 2 used archival samples to examine the cognitive structure of 3 groups of Rwandans at: pre-genocide, genocide and post-genocide time periods. Findings demonstrated a general pattern of decreased complexity during the genocide and higher levels of complexity in the years following. These findings suggest that severe trauma can lead individuals to re-assess basic assumptions about the world resulting in more integrative thinking and psychological preparedness (Janoff-Bulman, 1992; Suedfeld, 1997). Potential linkages between PTG and cognitive structure are discussed.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

In regions of the world with long histories of war and interpersonal violence, simply residing in the general area greatly increases the likelihood exposure to potentially traumatizing situations (Pham, Longman & Weinstein, 2004; Resnick & Burt, 1996; Bonanno, 2004). Understanding the relationship between violence and trauma in particular geographic areas has important implications for interventions that seek to stop cycles of violence from being transmitted from one generation to the next (Mamdani, 2001; Volkan, 1998). As continued attempts are made to intervene in perennially bloody regional and national conflicts, monitoring the range and impact that conflicts have on the individual is a central part of such processes. Staub (2006) views healing psychological wounds as an essential component of reconciliation and an important part of preventing renewed violence. Similarly, Awwad (1999) notes that psychological wounds cannot be separated from collective wounds, that such wounds are psycho-social with an emphasis on social.

The trauma caused by ethnic violence explains, for some, the rationale as well as the social impetus for victims to seek revenge – to become perpetrators themselves. The relationship between the exposure to violence, trauma and reactionary violence is a complex one; it does not follow that all or even a substantial number of individuals targeted in violent circumstances will take part in retaliatory violence. Part of the explanation of why people do or do not react violently may be found in exploring how these experiences are lived internally and psychologically. An important caveat to such investigations is that exposure to even extreme violence does not necessarily lead to traumatisation. In fact, recent research suggests that individuals exposed to a range of objectively traumatic events experience fewer post-traumatic symptoms than was commonly reported in the earlier literature. This growing body of research

persuasively argues that post-traumatic stress disorder is an over used diagnosis and may not be applicable in the majority of cases following severe life stress (Almedom, 2005). Although trauma causes disruption and emotional upheaval, most frequently such experiences remain within a 'normal' range and dissipate over time, never reaching pathogenic levels (Cassels & Suedfeld, 2006; Summerfield, 1999; Bonanno, 2004; Tedeschi & Calhoun, 1995; Park, 1998). Despite the growing belief that PTSD is a relatively rare result of trauma, much research continues to look for pathological responses rather than effective coping. This is true in the case of Rwanda where the investigation of long-term negative effects make up the vast majority of research on post-genocide psychological responses (Summerfield, 1999). On the other hand, instances of resilience and growth have been greatly under-studied. Survivors of the Holocaust have shown more life satisfaction than control groups and have demonstrated intra and inter-personal growth following their experiences (Cassels & Suedfeld, 2006). In Rwanda there have been no attempts to investigate whether the same pattern of post traumatic growth found in Holocaust survivors is present so soon after the genocide. Recent research on trauma in Rwanda has presented a link between personal level trauma and societal disintegration; however, it is not clear if the reverse would be true, that is, if post-traumatic growth were present, would this predict social reformation? It is this question that the present paper seeks to explore.

2 PSYCHOSOCIAL RECOVERY IN KIBUNGO PROVINCE

2.1 Overview of Trauma in Rwanda

An increasing amount of the psychological literature has addressed coping following the genocide of 1994 (Pham, Longman & Weinstein, 2004; Chauvin, Mugaju & Comlavi, 1998; Summerfield, 1999; Bagilishya, 2000). The majority of this literature focuses on traumatisation and, in particular, post-traumatic stress disorder (PTSD) indicating the persistence of high levels of pathology directly related to the genocide experience (Summerfield, 1999). Past research with Holocaust survivors has suggested that there is a tendency to overstate the extent that these symptoms are present at pathological levels (Cassels & Suedfeld, 2006); such overestimates have likely been made other cases of mass violence as well (Peddle, 1999).

The genocide of 1994 was not the first time Rwanda had seen extreme ethnic violence, rather it was the culmination of a long history of turmoil between Hutus and Tutsis beginning largely in 1959 when Belgian colonialists ceded power to the Hutu majority in what is known as the 'Hutu Revolution.' During this and subsequent periods of ethnic cleansing in 1963 and 1973, hundreds of thousands of Tutsis were killed or forced to flee the country (Mamdani, 2001). I have found no records from this time period that directly or indirectly allude to a high level of post-traumatic stress symptoms in the population although the killing was widespread and brutal. Although negative experiences were not soon forgotten, psychological and physiological symptoms were not expected to persist years after a traumatic period (Peddle, 1999).

There appears to be a general acceptance that PTSD and other long-term consequences are to be expected in the majority of instances of ethnopolitical violence. A recent UNICEF report indicated that exposure to the violence of armed conflict along with deprivation and poverty are the predominating causes of trauma in African people (UNICEF, 1996). Rwanda is

perhaps the prototypical example of an African nation where civilians suffered a tremendous amount of trauma during the genocide and continue to face daily hardship. Reports estimate that of those who were youths during the genocide, 96% witnessed some form of violence, 88% saw dead bodies, 80% had members of their family die and 91% believed that they themselves would die (Chauvin et al., 1998).

Investigations of responses to trauma following the genocide have utilized both culturally based notions of trauma as well as medically derived diagnostic criteria as the starting points for investigation (Gore & Eckenrode, 1996). Bagilishya (2000), a Rwandan psychologist, defined trauma as resulting from the exposure to "an intense experience that induces utter chaos that is the loss of all interior and exterior points of references (p. 347)." The Diagnostic and Statistical Manual of the American Psychiatric Association describes a traumatic event as one outside the range of normal human experience including experiencing, witnessing or learning about death, injury or serious harm (DSM IV, 1994). These definitions both appear to be speaking about similar occurrences, but it is not immediately clear that what they are referring to the same *trauma.* It is not surprising that concerns have been expressed regarding the suitability of trauma definitions to account for widespread experiences (Summerfield, 1999).

According to Summerfield (1999), traumatisation is most often used to refer to war-induced psychological conditions while lacking a consistent working definition. This has resulted in the tendency to use the term traumatisation in a figurative or journalistic way. The use of the broad classification PTSD has also been criticized for presuming that the disorder is a universal outcome without appropriate corroborating evidence across samples (Kleinman, 1988). Summerfield (1999) contends that at its origins PTSD is as much a socio-political as a medical response to the problems of a particular group at a particular point in time. Following the

Vietnam War the mental health field adopted traumatisation as a scientific truth, supposedly representing a universal and essentially context-independent entity. The specific context being that of 1970's America at a time when soldiers returning from the Vietnam War began seeking compensation from the government for their psychological trauma.

Research following major tragedies, including genocide, may identify post-traumatic stress disorder when in fact the distress that is present is within a non-pathological range given the situational stressors. In such circumstances psychologists may become so focused on psychological pathogenesis that they fail to duly consider the immediate problems of food, security, housing and survival (Dawes, 1994). Research on pathological responses to stress has also failed on occasion to acknowledge the absence of critical criteria required for PTSD diagnoses, instead focusing solely on the positive symptoms. For instance, the sections of the UNICEF (1996) report cited above by Chauvin and colleagues (1998) contain only those statistics which are most consistent with the definition of PTSD, when in fact there was evidence in the same report which suggest the opposite conclusion – that PTSD was not present. Of the same Rwandan sample, 86% had no difficulties concentrating or paying attention, 87% had no strong feeling about the event, 81% had no trouble feeling happiness or love, 86% were not easily irritated and 87% did not experience hyper arousal. Moreover, 90% maintained the same level of interest in activities as before, 90% had no difficulty sleeping, 86% invested in plans for the future and 76% reported the passage of time and making new friends had helped them feel better (Summerfield, 1999).

More recently, Pham and colleagues (2004) found that 25% of a large sample of Rwandans met criteria for PTSD. However, they note that of these individuals 57% did not show signs of avoidance / numbing, a critical feature for the diagnosis of PTSD (Breslau, 2001). The

authors suggest that since Rwandan culture discourages open displays of emotion the absence of these symptoms may be mediated by cultural expectations (Pham et al., 2004). They do not discuss the possibility that perhaps the absence of these definitional characteristics is indicative of non-pathological or normal functioning.

2.2 Shattering of the Assumptive World

The assumptive world is a strongly held set of assumptions about the world and the self. This set of assumptions is confidently maintained and used as a means of recognizing, planning and acting. Such assumptions are learned and confirmed through years of experience (Parkes, 1971; Janoff-Bulman 1989). This model predicts that in the event of catastrophic events, such as genocide, schematic views of the world are destroyed, forcing people to re-evaluate their most basic beliefs.

The traumatic fallout after the Rwandan genocide seems to be better accounted for by the assumptive world model than biomedical models (Summerfield, 1999). To a great extent, one can locate important aspects of the ethnic violence in terms of manipulated basic assumptions that had long pervaded the Rwanda psyche. The genocide itself was characterized by "actions which followed cultural patterning, a structuring logic...individual Rwandans lashed out against a perceived internal other that threatened, in their imaginations, both their personal integrity and the cosmic order of the state" (Taylor, 1999, p. 101). During and following the genocide Rwandans experienced trauma as the disintegration of personal and cultural meaning, often reporting an inability to describe the inexplicable evil, feeling empty, and not being able to obtain the closure needed to reconstruct their worldview (Bagilishya, 2000). Other scholars describe these events as having caused an "ontological rupture" severing the sense of continuity with the self, the community and the universe (Rutembesa, et al., 2003).

Summerfield (1999) contends that to view victims as passive receptacles of negative psychological effects which are categorically present or absent is an oversimplification. In addition to understanding trauma in terms of symptomatology (i.e. arousal, avoidance, numbing, intrusion), notions of a shattered assumptive world accord individual perceptions of coherence in the universe a central place in the experience of trauma and recovery (Antonovsky, 1986). Just as perceived disorder can bring about trauma symptoms, effective responses to trauma allow individuals to re-situate ideas about grief and trauma in a framework that is coherent (Bagilishya, 2000). Catastrophe can bring about the violent disruption of schema; however, schema change can also occur gradually through deliberate and predictable reshaping of one's worldview over time through a process of reformulating one's assumptive world (Rothbart, Evans, & Fulero, 1979; Janoff-Bulman, 1989).

The assumptive world model is congruent with recent research on hardiness, which seeks to explain the existential courage and motivation to cope effectively with stressful circumstances (Maddi, 1988; Maddi, 2002). Following devastating trauma, individuals are forced to confront fundamental questions concerning their existence which often lead them to revise and strengthen the basis for their sense of coherence. Increased research on the social and cognitive aspects of these revisions following trauma and the time frames during which they occur may provide insight into certain universal elements involved in adaptive and maladaptive stress responses.

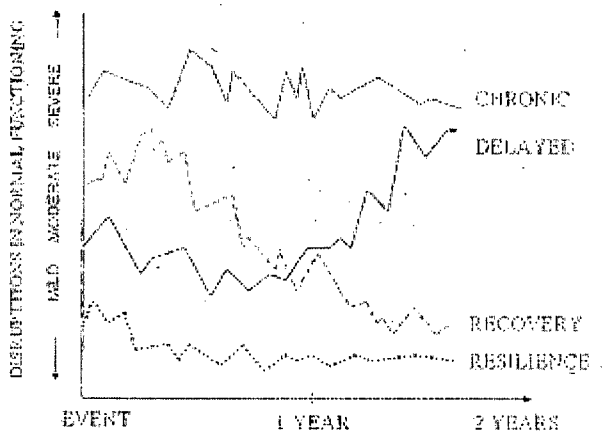
2.3 Responses to Stress

Critiquing psychopathology does not entail denying the serious negative effects of personal crises and trauma (Almedom, 2005; Carballo et al., 2004; Lewando, Hundt et al., 2004). There is however a growing recognition that the experience of internal-trauma is not an inevitable outcome of having suffered or having been exposed to severe stress. Drawing upon the

previous literature on stress responses, Bonanno (2005) proposes four prototypical patterns of disruption due to stress (See figure 1). 1. *Chronic Stress*: when the initial level of stress begins high and maintains a high level of disruption across time, 2. *Delayed* Stress: characterized by moderate initial disruption followed by improved functioning then a time-lagged resurgence of stress levels that exceed those initially experienced, 3. *Recovery*: a moderate stress following the initiating event, followed by a steady decline in disruptions, and finally 4. *Resilience*: which includes a mild to moderate experience of stress in response to trauma with a relatively quick return to baseline functioning. By differentiating the course that trauma-induced stress takes, Bonanno acknowledges there is a range of valid approaches and promotes the idea of *functional resilience* rather than the adherence to a particular formula for resilience (Litz, 2005).

Figure 1.

Prototypical patterns of disruption due to traumatic events



By inverting predictors of maladaptive stress responses (e.g. lack of social support, lack of education) Bonanno hypothesizes four pathways to resilience. These are: 1.*Hardiness*: Based on Kobasa's (1979) model based on the '3 C's of hardiness' (challenge, commitment and control). Challenge is the tendency to want to learn from experiences regardless if they are

positive or negative; people high on challenge view change as normal, interesting prompts for growth rather than threats to security (Maddi, 2002). Commitment is the opposite of alienation and includes being more invested in one's life circumstance. Finally, control entails the sense of having power over the situation and a feeling of influence in new situations (Kobasa, Maddi & Kahn, 1982). 2. *Self enhancement*: This feature has been shown to promote adaptive functioning and wellbeing through high self appraisals (Taylor & Brown, 1988). 3. *Repressive coping*: The use of an emotion-focused strategy contrary to the cognitive nature of hardiness and self-enhancement; repressing individuals tend to under-report subjective stress while still demonstrating heightened physiological arousal in response to the stressor (Weinberger, Schwartz & Davidson, 1979). Although this strategy is sometimes seen as maladaptive, individuals who repress do not show increased health problems relative to other groups and in some cases fare better than individuals who openly disclose their emotions (Bonanno, Noll, Putnam & Tricket, 2003). 4. *Positive emotion and laughter*: A response once seen as unhealthy denial has now been shown in, certain cases, to reduce or un-do negative emotion (Bowlby, 1980; Fredrickson & Levenson, 1998).

Bonanno's review focuses on the avoidance of maladaptive functioning and takes baseline wellbeing to be the ideal state to which the individual returns following a traumatic experience. This overview does not explore cases in which individuals advance to better-than-baseline functioning following stressful life events. Research not included in Bonanno (2004) indicates that there is another prototypical response to stress which involves recovery and growth beyond the initial pre-trauma levels and involves the reformulation of the individual's subjective understanding of themselves in relation to the world.

2.4 Salutogenesis

There are several constructs in the psychological literature that address the individual's capacity to overcome and in some circumstances grow from traumatic events. These include fortitude / strength (Strümpfer, 1995), hardiness (Kobasa, 1979; Maddi, 2005), post-traumatic growth (PTG) (Tedeschi & Calhoun, 1995), recovery (Harvey, 1996), resilience (Bonanno, 2004), self-efficacy (Bandura, 1977) and sense of coherence (SOC) (Antonovsky, 1979, 1987). All of these mark the exceptional capacity of humans to endure and surmount incredibly traumatic events; in some cases this entails profound transformations leading to growth beyond pre-trauma levels (Tedeschi & Calhoun, 2001).

Sense of Coherence (SOC) has been used to operationalize salutogenesis along a continuum of ease-disease, or distress-eustress. It is the framework most widely cited in the literature pertaining to the positive outcomes of stress (Almedom, 2005; Suedfeld, 1997). SOC is defined as:

> A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured and predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement (Antonovsky, 1987, p. 19).

SOC includes three sub-scales: 1). *Comprehensibility*: the individual's understanding of why adversity happens; 2). *Manageability*: the extent to which an individual feels they have the resources to meet the challenges of stressful situations; and 3). *Meaningfulness*: how worthwhile the individual deems their engagement with their life circumstances to be. These subscales

overlap with the 3 primary assumptions of the assumptive world model: 1). *Perceived benevolence of the world*: a base rate understanding of benevolence/malevolence in the world 2). *Meaningfulness*: people's belief concerning how reliably outcomes in the world can be predicted, and 3).*Worthiness of the self*: the extent to which the individual is responsible, as a result of their moral character, for effecting situational outcomes (Janoff-Bulman, 1989).

Tedeschi and Calhoun (1995) developed the concept of post-traumatic growth "in the wider context of research on resilience, self-efficacy, hardiness, and SOC, among other positive aspects of stress such as the concept of inoculation" (Almedom, 2005, p. 256). The presence of PTG does not demand that negative trauma symptoms not be present; rather, it refers to a general positive transformation of relationships, spirituality and other basic aspects of ones orientation toward life. These gains can, but do not necessarily exist independently from the sadness and pain that follows a traumatic event (Tedeschi & Calhoun, 2006). A recent review of post-traumatic growth following a range of stressful life events, from no stress to high stress (e.g. surviving the fire-bombing of Dresden), demonstrated an inverted U-curve effect. That is to say, individuals who experienced moderate stress showed the greatest post-traumatic growth while the two extremes of both no stress and extraordinary stress showed little PTG (Powell, Butollo, Rosner, Tedeschi & Calhoun, 2003). Support for the inverted U-curve has been found following recent ethnopolitical violence in Bosnia and Herzegovina where survivors of extreme stress demonstrated substantially lower PTG than those individuals who had only a moderate degree of stress exposure. In this same sample, women showed significantly greater levels of PTG than men and there was a negligible relationship between number of traumatic events experienced and PTG (Powell et al., 2003). On the contrary, a growing body of research has

argued that as the severity of trauma increases, so too does the potential for greater post-traumatic growth (Tedeschi & Calhoun, 2006).

The present study sought to investigate patterns of post-traumatic growth in Rwanda. In particular, whether PTG increased with the experience of more traumatic events and secondly, the extent to which post-traumatic growth in Rwandans followed a similar pattern found non-African samples. Trauma and SOC were chosen as the main predictor variables; it was recognized that cultural differences in expressions of coherence may vary, but the primary aspects of coherence (meaningfulness, manageability and comprehensibility) were expected to be culturally independent. The trauma scale measured objective traumatic events providing a concrete indication of trauma experiences. The impact of disclosing one's story was assessed and the implications for individual reconstruction of a meaningful narrative are discussed in light of recent findings (Cassel & Suedfeld, 2006; Schoutrop, Lange, Hanewald, Davidovich & Solomon, 2002). Finally, attitudes toward the Rwandan based justice as well as perceptions of social stability were assessed; these two measures were chosen to serve as indices of perceived social progress. These assessments were particularly interested the role of Rwanda's grass-root Gacaca courts. Gacaca courts are extremely local community bodies where individuals assemble to hear evidence from genocidaires and victims in the hope of facilitating reconciliation. These courts are the first of their kind to be tried on such a large scale and to deal with such serious matters.

2.5 Brief Explanation of the Gacaca Courts

The traditional form of justice known as Gacaca courts (which literally means 'courts on the grass') has been adapted to deal with the overwhelming number of cases which need to be heard following the genocide. Gacaca courts have been operating at some capacity since the RPF implemented them in 1999, but it was only in 2005 that Gacaca entered the trial phase and began

to process detainees. In Rwanda, genocide crimes are divided into four categories: Category one is the designation given to the architects of genocide, notorious murderers, those in positions with a great deal of authority and persons responsible for sexual crimes; these perpetrators are not tried by Gacaca but at national or international tribunals. Gacaca courts are responsible for the remaining three categories of crimes which include physical violence up to and including murder, destruction of property and other forms of criminal behaviour (See Appendix 2 for more detail on levels 1 to 3). Gacaca courts take place at a very local level on a weekly basis; cases are heard by a panel of local elders and persons of high regard who pass their decisions with little chance for appeal. At present there are over 11 000 Gacaca jurisdictions in Rwanda (Tiemesson, 2004; Sarkin, 2001; Daly, 2002; Kirkby, 2006).

3 STUDY 1: POST-TRAUMATIC GROWTH AND RECONCILIATION

The present study investigated salutogenic responding in a sample of Rwandan university students. This entailed several hypotheses:

1. Compared to Hutus, Tutsis will have had greater exposure to trauma. They will more in favour of vengeance and more supportive of government violence as a means of conflict resolution (Corey & Joireman, 2005).
2. I expected evidence for post-traumatic growth (PTG) after trauma. That is, overall there should be scale scores similar to those found in previous studies using the same measure (See Powell, 2001 for a review).
3. A main effect of trauma on PTG was predicted as well as an interaction wherein individuals exposed to more objective traumatic events (from a list of 7) and who also had high levels of SOC would experience greater PTG than individuals who experienced fewer traumas and having lower SOC.
4. Greater PTG would be predictive of greater openness to reconciliation (Staub, 2006).
5. The earlier participant disclosed their story, the more benefit they would derive from this process of sharing. This indicates that the longer individuals wait to disclose, the more time that is spent without a meaningful narrative of their personal experience. As time increases, the greater the chance these individuals will not develop a coherent view of the impact these experiences have on their present lives (Niemeyer, 2001; Antonovsky, 1987).

6. It was anticipated that disclosure of personal-genocide related experiences would be related to a more positive recovery in terms of subjectively less influence of genocide 13 years after the actual event (Cassels & Suedfeld, 2006).

3.1.1 Design and Procedures

Questionnaire data pertaining to demographic and psychological variables were collected from 43 first year Rwandan university students (32 males; 11 females; *M* age = 32 years). The data were collected in collaboration with faculty members from the University of Kibungo. It is important to note the exceptional nature of the present sample is not, because of their high level of education, representative of the general population.

Dependent Measures:

1. *Cumulative Trauma Index* (Pham, Longman & Weinstein, 2004) an objective measure of trauma tailored to the Rwandan genocide (c.f. Holmes & Rahe, 1967). Asks participants to indicate if they underwent 7 common traumatic events directly related to the Rwandan genocide and its aftermath (α =.80).
2. *Post-traumatic Growth Index* (PTGI; Tedeschi & Calhoun, 1995) is a 21-item measure (α = .84) of individual perceptions of positive change in life as a result of a traumatic event. Socially desirable responding was taken into consideration during test construction. PTGI is not correlated with the neuroticism subscale of the NEOPI suggesting it accounts for growth beyond trait level emotional stability (Costa & McCrae, 1985; Tedeschi & Calhoun, 1996).
3. *Sense of Coherence Questionnaire* (SOCQ; Antonovsky, 1986) is an abbreviated 13 item version of the original 29 item measure. A recent meta-analysis of

127 studies found α reliabilities which ranged from .70 to .90 (Erikson & Lindstrom, 2005). The present study represents the first known use of the SOCQ with a Rwandan population. This sample had a lower α level (.59) than past research.

4. *Self-Esteem* (SES; Rosenberg, 1965) consisting of 10 items on a 5-point scale from strongly disagree to strongly agree. The α level (.52) was lower than desirable, perhaps because of cultural nuances in the measure. For instance, being part of a collectivist society may lead individuals to base their sense of self-worth more on their ability to fulfill obligations to the group than on personal achievements (Markus and Kitayama, 1997). This may account for the lower overall internal α reliability, particularly for some highly individualistic items (e.g. I feel I do not have much to be proud of; I take a positive attitude toward myself.)
5. *Openness to Reconciliation* (Pham, et al., 2004) a six item scale (α = .46) scored on a 5-point scale of very unimportant to very important. It assesses willingness to put aside ethnic differences in order to promote reconciliation (e.g. people must learn to depend upon each other, no matter what their ethnic group; our community would be a better place if there were only people of my own ethnic group (reversed)).
6. *Acceptance of State-Sponsored Violence as Conflict Resolution* (Pham et al., 2004) asked "Do you think it is appropriate for government authorities to ask civilians to use arms in the following circumstance." Examples of the circumstances include: keeping politicians in office, defending community and preventing crime. Responses were scored 'yes' or 'no' and summed to provide an overall index (α = .52).

7. *Negative Social Perceptions* (Pham et al., 2004) used three items to assess views of society as indicated by trust between neighbours, conflict over land and conflict over housing ($\alpha = .58$).
8. *The Vengeance Scale* (Stuckless & Goranson, 1992) assessed peoples' attitudes toward the idea of payback and other forms of retribution (e.g. I believe in an eye for an eye; Revenge is sweet) ($\alpha = .83$).

3.1.2 Analysis 1: Demographic and Ethnic Differences

The sample was comprised of: Hutu (n = 21), Tutsi (n = 9) and individuals who indicated they were members of an 'Other' group (n = 9) (note: these individuals were not from the *Twa* ethnic group that makes up about 1% of the Rwandan population). Independent samples t-tests examined mean differences between Hutu and Tutsi participants. As predicted in hypothesis 1, results indicated mean differences between Hutus and Tutsis on several variables. Tutsis spent more years in exile t (25) = 2.93, p = .007 (Hutu M = 1.05; Tutsi M = 7.38), were less religious t (28) = 3.49, p = .002, (Hutu M = 4.48; Tutsi M = 3.44) and reported having experienced a greater effect from sharing their experiences about the genocide t (27) = 2.5, p = .02, (Hutu M = 4.00; Tutsi M = 4.56). Approaching significance was the finding that Tutsis had more interactions with other ethnicities t (27) = 1.95, p = .06, (Hutu M = .83; Tutsi M = 1.00). Also, Tutsis experienced more traumatic events on average (M = 4.25) than Hutu participants (M = 2.86). The rest of the items did not differ significantly as a function of ethnic identification.

The group which identified themselves as of the 'Other' category on the questionnaires showed no significant differences from the Tutsi sample although there were some differences between this group and the Hutu sample. Specifically, this group reported higher levels of vengeance (M = 3.87), t (29) = 2.90, p = .007 compared to Hutus (M = 2.70) but not compared to

Tutsi (M = 3.23). They had more positive attitudes toward the judicial processes t (29) = 2.25, p = .03 (Hutu M = 2.65; Other M = 3.13) and had more traumatic experiences (M = 3.60) than Hutus (M = 2.86) but fewer than the Tutsis (M = 4.25).

Since the above discrepancies were the only significant demographic differences, the remainder of the analyses were conducted with the full sample. On average, individuals rated the genocide as having a moderate influence on their life now (M = 2.95 on a 5-point scale). Sixty five percent of the sample had been physically displaced during the genocide and 60.5% reported having had immediate family members die as a result of the genocide (M = 2 deaths). Fifty-two percent of the sample was married and on average had been for 4.83 years. There was a very high level of self reported religiosity with 81.4% reporting that they were moderately high to highly religious. Religiosity itself was negatively correlated with the number of family members participants had lost r = -.31, p = .05.

Following the genocide, external help had not been available for 30.2 % of respondents, 34.9% received educational help and 32.6% reported having received religious help. Very few respondents received the other forms of help inquired about, i.e.: legal (7%), medical (2.3%), psychological (4.7%) pharmaceutical (0%).

3.1.3 Discussion

The demographics demonstrate that this particular sample was highly traumatized. It is important to note the objective nature of the trauma measurement used as it gives a clear indication of actual events that were experience and in so doing avoids using the term 'traumatisation' in a vague sense. Establishing that these participants were exposed to the genocide provides a strong basis for the remainder the research.

The ratio of Hutus to Tutsis showed slightly higher numbers of Tutsis (21%) than is representative of Rwanda as a whole (14% Tutsis; 85% Hutu). This finding is supportive of accounts which note that there is a preponderance of Tutsi in socially privileged positions (e.g. studying at university; Reyntjens, 2004; van Leeuwen, 2001; Tiemessen, 2005; Corey & Joireman, 2004; Mgbako, 2005; Human Rights Watch, 2001). It is possible that this present finding is also indicative of systemic social factors influencing enrolment in post-secondary education.

The presence of a significant number of participants who did not specifically indicate their ethnicity but rather checked the 'other' option of the questionnaire presents an interesting empirical parallel to recent political and cultural theories regarding changes in ethnic identification in Rwanda. Specifically, the government of Rwanda claims that ethnicities should no longer be of importance, stating that everyone is simply Rwandan (Rutembesa, Semujanga & Anastase, 2003). This has lead to widespread criticisms and worry that this is simply a means for the government, which is primarily comprised of the minority Tutsi group, to avoid power sharing – a historical problem in Rwanda (Mamdani, 1999; Mgbako, 2005). The current data are too few (N = 9) to make any definite empirically claims about this particular issue; the matter of changing ethnic identification is however an important area for future research.

3.2.1 Analysis 2: Post- Traumatic Growth

The sample demonstrated substantial levels of PTG confirming hypothesis 2; in fact, the levels were higher than any previous sample (M = 87.86) know to date (see Appendix 1 for comparative scores).

As predicted in hypothesis 3, a directional link was established between objective cumulative traumatic events and PTG (r = .26, p = .05, 1 tailed). There were also the predicted correlations

between PTG and sense of coherence (SOC) (r = .34, p = .03) and support of local justice (r = .40, p = .01). The number of family members who died was positively related to levels of self-esteem r = .41, p = .01 as were the cumulative traumatic events experienced r = .36, p = .02. There was no significant relationship between the various forms of help received and PTG.

Sense of Coherence, cumulative trauma and Rwandan-based justice variables were put into a linear regression model predicting PTG. The model was significant F (2, 44) = 6.43, p < .001 and predicted a substantial amount of variance (R^2 = .25). The effect of these predictor variables expressed as standardized beta weights were moderate: SOC β = .37, p < .01, trauma β = .35, p < .05 and local justice β = .31, p < .05. The difference between men (M = 90.33) and women's levels of PTG (M = 80.36) approached significance t (39) = 1.78, p = .08.

To assess the interaction between SOC and trauma on post-traumatic growth as predicted in hypothesis 3, a comparison of mean scores was carried out. The sample was divided into a 2 × 2 table using a high / low median split on both scores of trauma and SOC to create four cells containing PTG scores. These cells consisted of individuals with: 1). Low SOC, high trauma 2). High SOC, high trauma 3). Low SOC, low trauma and 4). Low SOC, high trauma (See Table 1). Examination of the means demonstrated the anticipated interaction with substantially higher levels of PTG in the high SOC, high trauma group (M = 97.58, SD = 14.34). The other three cells had much lower levels of PTG and their mean scores did not vary greatly. The overall mean level of PTG was 87.86. A contrast comparing the high-high group to the three other groups was significant, t = 3.16, p < .01, one-tailed test.

Table 1. Post-traumatic Growth

	Low Coherence	High Coherence
High Trauma	$M = 84.00$ $\sigma = 14.34$ $n = 11$	$M = 97.58$ $\sigma = 15.56$ $n = 12$
Low Trauma	$M = 83.00$ $\sigma = 17.15$ $n = 4$	$M = 84.20$ $\sigma = 16.56$ $n = 15$

3.2.2 Discussion

This is the first empirical evidence to demonstrate PTG in Rwanda as a result of genocide related trauma. The extremely high scores may be a result of the fact that the sample is comprised of a very high achieving group whose academic success is part of their post-traumatic growth. Nonetheless, it is a striking example of a relatively quick and meaningful advance in individual lives following severe trauma.

The demonstrated link between trauma and post-traumatic growth is strengthened by the fact that the measure of trauma was objective, allowing for a more causal link to be inferred. This provides a clear example of an often under reported 'prototypical stress response' (c.f. Bonanno, 2004) in which individuals actually do better following trauma than at a pre-trauma baseline.

There was evidence of the predicted relationship between SOC and PTG as well as a positive relationship between attitudes toward local justice and PTG. The interaction between trauma and SOC lead to substantially higher PTG and provides support for the theoretical prominence given to SOC in the salutogenesis literature and suggests that the basis of this relationship is cross-cultural (Antonovsky, 1987; Almedom, 2005). These findings may help disambiguate previous results which have presented an unclear relationship between the severity

of traumatic experiences and PTG (Powell et al., 2003). SOC is central to how individuals interpret and respond to various forms of trauma and that this relationship may be particularly crucial when the level of traumatic exposure is especially severe as in the case of genocide. These findings suggest the salutary benefits of trauma hold only for those with a high SOC which in turn demands greater resources for coping (Selye, 1956). In the short term this relationship may be demonstrated by an inverted U curve when there are too few resources to cope with particularly high levels of trauma; however, as time passes and individuals are able to re-establish their coping resources and the immediate trauma is decreased, a substantially higher level of PTG can emerge. This is contrary to the inverted U-curve hypothesis and suggests that with the progression of time, severe trauma may lead to proportionately greater PTG (Tedeschi & Calhoun, 2005). These previous studies did not take into account participants' levels of SOC which perhaps masked a pattern more similar to the present findings.

The relationship between SOC and attitudes toward local justice suggests that higher individual SOC encourages individuals to turn to the most available frameworks for culturally derived restorative justice / reconciliation and peace. This supports a bottom-up approach to reconciliation and justice where individuals with high SOC comply with and promote aspects of community and national reconciliation, consequently lending greater legitimacy to the process. The community courts do not, and perhaps cannot, meet the norms for fair trials and justice as prescribed by international standards (Sarkin, 2001). Some argue that meeting international standards should not be made a goal and that local justice is already allowing for a workable and necessary trade-off between retributive and restorative justice (Kirkby, 2006). Gacaca courts allow for retributive justice through punitive fines and up to 30 year jail terms, while maintaining a focus on elucidating incidents surrounding the genocide and encouraging survivors to forgive

their persecutors in the interest of establishing a lasting peace in their community. These courts help provide survivors closure and the space to mourn their family according to local customs which emphasize appropriate handling of the remains of the dead (Bagilishya, 2000). In the present sample, SOC of the individual was strongly linked to support for programs aimed at establishing coherence at the community level. Such outcomes are reflective of the general aims of the Gacaca courts, suggesting they have achieved a commendable degree of success (Daly, 2002).

The importance of the individual to community processes is compatible with research on individual resilience which acknowledges that resources and adversities involved in the process of resilience are embedded in the social context (Peddle, 1999). Chauvin and colleagues (1998) suggest that the difference between individuals who display resilience after having lived through extraordinarily adverse and life threatening experiences and those who do not is the presence of family strength and unity, social-ideological networks and political and religious consciousness. The link between SOC and broader social unity is one which deserves to be taken into consideration in future research in post-conflict situations.

The sex differences found in the present sample were in the opposite direction of previous findings in genocide-affected populations (Powell, 2003; Tedeschi & Calhoun, 1996). Men showed higher levels of PTG than women although the difference did not quite reach statistical significance ($p = .08$). One potential reason for this gender reversal is the central role of women in social and political affairs. Rwanda is one of the few countries in the world to achieve gender parity within parliament and to have women occupy central roles of responsibility at various levels of society (Powley, 2005). Perhaps different social expectations in regards to gender roles influences the resources and community support networks women have

access to. There may also be additional demands on women occupying traditionally male positions which require them to maintain behaviour suitable to a particular social position at the expense of fully accessing community support and attending to their own needs.

The counterintuitive positive relationship between traumatic events and self-esteem provides evidence against pathogenic conceptions of survivor syndrome and the one-sided focus on negative aspects of traumatic experiences (Eitinger, 1961; Dasberg, 2001; Bar-On, Eland & Kleber, 1998). These findings suggest a form of survivor pride (Suedfeld, 2000) which emerges in individuals who have overcome potentially devastating life events. This result may be particularly evident in the present sample of highly educated individuals. Representative sampling by Pham et al. (2004) demonstrated that less than 2% of Rwandans received any form of post secondary education. Thus, this group has attained a level of success that may also translate into higher self-esteem and even acclaim from others (Novick, 1999). However, this pattern of higher self-esteem is inconsistent with research from survivors of the Holocaust (Cassels & Suedfeld, 2005). Further investigation is needed to clarify this interesting result.

3.3.1 Analysis 3: Openness to Reconciliation

3.3.2 Overview of Rwandan Reconciliation

Political regions which have seen instances of mass violence often lapse back into a destruction phase following periods of relative calm (Long & Brecke, 2003; Staub, 2005). Renewed violence threatens to erase the rebuilding that has taken place and serves to perpetuate cycles wherein the role of victim and perpetrator shift from one group to the other (Mamdani, 2001). According to Staub (2006) there is a particularly high risk of renewed violence in Rwanda where the extreme violence was abruptly stopped when one side, the RPF, clearly defeated soldiers of the Habyarimana regime and various militia groups.

Rwanda has managed to stave off any substantial incidences of renewed violence within its borders for the past 12 years. There has been substantial growth in various areas of the economy, particular in cellular communications and other forms of information technology. The wounds of genocide are still not completely healed and there remain deep ethnic divisions and scepticism concerning the country's stability and the prospects for unity and reconciliation (Staub 2006; Tiemesson, 2004). Political affiliations and societal allegiances continue to be thought of in terms of Hutu and Tutsi ethnic membership. Ethnicity remains a salient topic, representing divergent interpretations of the historic aspects of the genocide and constituting tense power dynamics both politically and between individuals (Corey & Joireman, 2004).

The social and personal aspects of reconciliation are interwoven and cannot be adequately addressed apart from one another. Pham and colleagues describe reconciliation as:

> The process whereby individuals, social groups, and institutions: 1). Develop a shared vision and sense of collective future (community) 2). Establish mutual ties and obligations across lines of social demarcation and ethnic groups (interdependence) 3). Come to accept and actively promote individual rights, rule of law, tolerance of social diversity, and equality of opportunity (social justice), and 4). Adopt non-violent alternatives to conflict management (non-violence) (Pham et al., 2004, p.604).

Staub (2006) contends that reconciliation takes place at the psychological, political, institutional/structural and cultural levels. He presents 7 processes which operate on a continuum of renewed violence to reconciliation. These are: truth, justice, healing of past wounds, shared views of history / shared collective memories, deep contact / shared goals, raising inclusively caring children with moral courage and understanding the roots of violence. To date, there has

been little empirical evidence concerning which end of the violence - reconciliation continuum Rwanda is moving toward.

Acts of mass violence have a resounding impact on groups of people affected, both as victims and perpetrators (Mamdani, 2001; Staub, 2003). Survivors may feel betrayed and resent the fact that they were abandoned by their former associates and friends which may in turn lead to a greater willingness to engage in violence against these groups (de Forges, 1999; Staub & Pearlman, 2001). People who have been victimized may suffer complex trauma which makes it difficult to re-establish trust and perpetuates feeling that the world is a dangerous place requiring self-defence (Staub, 2006; Herman, 1992; McCann & Pearlman, 1990). Individuals who took part in brutal acts of violence and murder have also been shown to experience symptoms of trauma, adding an important consideration in the context of reconciliation (Rhodes, Allen, Nowicki & Cilliesen, 2002). Following initial acts of violence, perpetrators may become increasingly callous toward others making it easier to re-engage in violence against the same group or new victims (Browning, 1992). Passivity and inaction during genocides have similar psychological consequences as perpetrating violence (Staub, 1989). Bystanders, like perpetrators, often hold on to the belief that the violence they took part in was the fault of the victimized group, citing 'just world' beliefs which imply that innocent people would not suffer such persecution (Lerner, 1980). It is common for perpetrators to downplay the extent to which they caused harm to others and they have been described as showing little sympathy before truth and reconciliation commissions (Byrne, 2003).

Recent findings demonstrate that Rwandans who meet criteria for PTSD symptoms are less open to reconciliation. Specifically, these individuals held negative attitudes toward local justice, believed less in community, non-violence and were less supportive of interdependence

(Pham et al., 2004). These results lend support to Staub (2006)'s notion that unhealed psychological wounds lead down the path to renewed violence. The second part of the present study explored whether individuals who have higher levels of post-traumatic growth demonstrate *increased* openness to reconciliation.

3.3.3 Results

Religiosity, marital status and years married were identified as possible confounding variables and were controlled for in order to prevent mis-attributing effects (Pargament, Desai & McConnell, 2005; Pargament, 1997; Falsetti, Resick & Davis, 2003). As predicted in hypothesis 4, PTG was positively related to openness to reconciliation $r = .34$, $p = .03$, as were higher levels of SOC $r = .34$, $p = .04$. High levels of SOC were also negatively correlated with negative perceptions of society $r = -.42$, $p = .04$ and openness to reconciliation was negatively related to the belief that the world is a just place $r = -.50$, $p = .001$.

Linear regression was used to predict openness to reconciliation. Willingness to endorse state-sponsored violence as a means of conflict resolution and PTG were the selected predictor variables. The model was significant $F(2, 37) = 3.28$, $p < .05$ ($R^2 = .15$) with standardized effect sizes which approached significance for both PTG ($\beta = .27$, $p = .07$) and willingness to resort to violence ($\beta = -.23$, $p = .10$).

3.3.4 Discussion

Hypothesis 4 was supported by the demonstration that, just as high levels of PTSD symptoms relate to a greater likelihood of renewed violence, high PTG is related to greater openness to reconciliation (de la Rey, 2001; Pham et al., 2004). This provides additional empirical evidence of the interconnectedness of the broad social issue of reconciliation and personal growth following psychological trauma (Staub, 2006; Staub & Pearlman, 1999). In their

2004 study based on earlier data, Pham et al. speculate that Rwandans are beginning to interact more freely with members of other ethnic groups at an individual level, but may not be ready to engage at the community level. The present findings suggest that personal growth and increased SOC emerging over time are key aspects facilitating the progression from interpersonal healing to societal reconciliation. SOC also correlated with openness to reconciliation which further indicates that individuals with higher levels of personal coherence view society as a more comprehensible, meaningful and manageable place where social restoration is achievable and worth working toward (Antonovsky, 1987; Tedeschi & Calhoun, 2005).

Belief in a just world strongly negatively correlated with openness to reconciliation in line with previous observations made by Staub (2006). This finding further suggests that the acknowledgement of the senseless and undeserved nature of violence is an important aspect of the progression of reconciliation. Mamdani (2001) argues that moving away from traditional victim / killer dichotomies will allow for broader recognition of the suffering that the entire nation underwent and allow for non-partisan healing to take place.

3.4.1 Analysis 4: Disclosure

3.4.2 Overview of Post-traumatic Disclosure

Following the horrors of genocide, survivor accounts provide integral information about personal and social post-conflict experiences in the form of narratives (Neimeyer, 2001). To date, research on post conflict disclosure has focused primarily on survivors of the Holocaust (Cassel & Suedfeld, 2006; Kenyon, 2005; Dasberg, Bartura & Amit, 2001). There is also a sizeable literature which has focused on the clinical application of disclosure in a therapeutic setting (Rynearson, 2001; Westwood, Keats & Winesky, 2003). In such cases, therapy centers on creating meaningful narratives in psychotherapy where the therapist and client jointly work

through past experiences to come to a less disruptive understanding of what certain experiences meant on a personal level (Neimeyer & Raskin, 2001; Neimeyer & Mahoney, 1995).

The use of narratives is an important means through which survivors can begin to reconstruct their assumptive worldview in a meaningful way (Janoff-Bulman, 1989; Neimeyer, 2001). The human predilection to relate experiences in order to make sense of them is illustrated in the timeless and cross-cultural tradition of story telling (Neimeyer, 2005; Hermans, 2001). Cognitive models also provide support for the centrality of narratives in human understanding, suggesting that all narratives are schematically oriented into a beginning, middle and end allowing for a cohesive understanding of experiences across time (Barsalou, 1988; Mandler, 1984).

Individuals exposed to catastrophic events may experience severe disruptions in the organization of their personal narrative (Janoff-Bulman, 1989; Neimeyer, 2005). If these narratives remain disorganized and conflicting, the unprocessed and unresolved events may lead to a disproportionate or even uncontrolled attention being paid to 'emotion schema,' which are non-cohesive affective patterns linked to visceral and physiological feedback often associated with PTSD (van der Kolk & van der Hart, 1999). These emotional representations can be seen as 'pre-narrative' since they do not provide an overarching sequence of coherent assumptions but rest primarily on sporadic emotion (Janoff-Bulman, 1998). Unlike emotional schema, cognitively processed narratives are characterized by cohesive life themes and tend to move toward abstract goals (Neimeyer, 2001).

Narratives operate at the personal, interpersonal and broader social / cultural levels in a complex and overlapping manner (Neimeyer, 2001). Personal narratives provide a guiding cognitive-affective-behavioural structure which dictates the range of emotional response and

guides performance on the stage of the social world (Neimeyer, 2000). Interpersonal narratives are a matter of account making with others, a sharing of relevant experiences and information which fosters bonds between people; this level of narrative disclosure has been shown to be particularly important for overcoming difficult life experiences (Harvey, 1996; Rynearson, 2001). At the broader social level, dominant narratives are sometimes enforced by political or social institutions and can come to marginalize individual and even interpersonal narratives if they are seen to be disruptive to the societal status quo. Such high-level cohesion provided by social institutions is necessary for a functioning society; however, rigid and inflexible social narratives can become hyper-cohesive and not allow for the expression of individual experiences in the public forum (White & Epston, 1989). Such excessive political control has been an ongoing criticism of the RPF government's insistence on a singular Rwandan identity.

Following a traumatic 'seismic event' and the personal, interpersonal and social upheaval which ensues, the reformulation of narratives is neither exclusively good nor bad. Rather, the narrative process itself provides a context wherein post-traumatic symptoms or PTG may emerge (Niemeyer, 2004; Tedeschi & Calhoun, 1995). For instance, disclosure is sometimes met with empathic failure from others leading to social marginalization and fewer resources for effective coping (Niemeyer & Jordan, 2002; Dasberg, 2001; Doka, 2002). The extent to which society recognizes and sanctions mourning will have an impact on whether survivors feel their experiences are being recognized (Neimeyer, 2004). In Rwanda where there has been near ubiquitous loss the national narrative itself has embraced the grieving process dedicating each April to the commemoration of Genocide victims.

Narrative construction is a highly interactive process and often involves many different people and groups across various life stages (Nadeau, 2005). Making archival records of survivor

oral histories has itself become an important part of survivor post-traumatic experiences (Laub, 2002; Kenyon, 2005). The impact of disclosure has been assessed primarily with Holocaust survivors, but the literature is beginning to include a range of survivor groups (Schoutrop et al. 2002). There is evidence from a wide breadth of samples that indicate disclosing one's story has positive psychological health benefits (Cassels & Suedfeld, 2006; Laub, 2002; Weine, Becker, Vojvoda et al., 1998; Agger & Jensen, 1990; Cienfuegos, Monelli, 1983). Furthermore, Pennebaker and colleagues have demonstrated that the act of disclosure can lead to decreased post-traumatic symptoms, longitudinally increased health benefits and improved interpersonal relationships (Suedfeld & Pennebaker, 1997; Pennebaker & Francis, 1996; Pennebaker, Barger & Tiebout, 1989).

3.4.3 Results

As predicted in hypothesis 5 the length of time which elapsed before individuals told their stories to others was positively related the influence of genocide on one's present life r = .39, p = .01. The amount of time that elapsed before sharing with one's family positively correlated with support for the Gacaca community courts r = .39, p = .01 and the amount of time before telling others was negatively related to religiosity r = -.33, p = .03.

Religion and marital variables were controlled for in order to rule out additional noise in the study except when religiosity was itself the variable of interest. Religion has been shown to have a complex relationship in the context of disclosure which deserves more careful attention than could be given in the present analyses (Murray-Swank, Lucksted, Medoff, Yang, Wohlheiter & Dixon, 2006).

Hypothesis 6 was also supported through the demonstration that disclosure was negatively related to the present influence of genocide on life r = -.42, p = .01. The importance

placed on giving an account of one's story to others was positively correlated with self-esteem r = .31, p = .05 and a positive view of society r = .33, p = .04. Perceiving positive effects of having shared one's story related positively to SOC r = .46, p = .01, was negatively related to support for state sponsored violence as a means for conflict resolution r = -.31, p = .05 and negatively related to religiosity r = -.34, p = .03.

Disclosure was also positively related to support for Gacaca courts r = .32, p = .02 and was negatively related to belief in a just world r = -.34, p = .03. The level of importance placed on telling one's story was negatively related to the endorsement of retributive justice r = -.35, p = .04.

3.4.4 Discussion

The findings present an overall positive picture of disclosure following ethnopolitical violence. The more time which elapsed before disclosing was related to greater influence of the genocide on individual's present lives, replicating findings from Cassels and Suedfeld (2006). The longer the period of time before sharing one's story with family members was related to greater support for community Gacaca courts. This suggests that for some individuals, Gacaca courts have provided a community-sanctioned forum where they can share experiences that they previously felt unable, or unwilling to disclose, even to family. Without a specific forum for sharing, survivors may have felt obliged to remain silent about their experiences, perhaps as a sign of strength (Lange, 1996). Gacaca has provided a community-supported venue for disclosing, which in turn has received greater support from those who would have not otherwise had the opportunity to share.

The amount of time that had passed was also negatively correlated with levels of religiosity. Religious venues may have provided a more accepting forum for disclosure than

secular ones prior to the Gacaca proceedings with the church providing social support networks encouraging individuals to share their stories sooner. Rwandans, both Hutu and Tutsi have long been influenced by Catholicism which may have encouraged increased disclosure in the form of confession which has been previously related to positive outcomes following trauma (Murray-Swank et al., 2006; Pargament, 2005).

Overall levels of disclosure were related to support for Gacaca and negatively related to support for retributive justice and just world beliefs. These findings jointly represent support for restorative focus in the community, perhaps because of the widely acknowledged lack of alternatives (Uvin & Maironko, 2003; Kirby, 2006). Staub (2005) indicates that just world thinking is involved in tendencies to rationalize and minimize the suffering of survivors; the present findings support this observation and demonstrate that decreased just world thinking is related to a preference toward restorative justice models rather than retributive justice, even though many of those responsible for acts of genocide will not receive punishment (Kirkby, 2006). This restorative orientation is further supported by the finding that giving account of one's story to others related to positive perceptions of society and correlated with higher levels of self-esteem which has been linked to higher levels of PTG (Park et al., 1998). Establishing truth is an important aspect of reconciliation (Staub, 2006) and bringing forth the truth regarding the genocide is a primary focus of the RPF and has received a great deal of media attention (Tiemessen, 2004). It is not immediately clear the extent to which self-esteem leads to more disclosure or how much disclosure promotes self-esteem; however, this relationship deserves further investigation. Individuals with more self-esteem may be motivated to 'do their part' as good citizens and openly disclose their stories to others. On the other hand, positive social

feedback received for supporting the popular reconciliation effort may serve to increase self-esteem.

Having rated the experience of disclosure as more positive was related to higher levels of SOC and was negatively related to support for government sanctioned violence as a means of conflict resolution. It appears that individuals who experienced subjective benefit from disclosure reconstructed personal narratives which increased the comprehensibility of their own experiences in relation to the chaos of genocide. Such narratives have in the past also been related to less support for violent forms of conflict resolution (Neimeyer, 2005; White & Epston, 1990). These findings support the observations by Cassels and Suedfeld (2006) that some genocide survivors wanted their story to be a warning that would prevent future acts of mass violence. The present findings suggest that individuals who disclose find it more positive of an experience, potentially because they see the positive social impact of educating youth about the pitfalls which lead to violence.

Finally, religiosity negatively correlated with how positive participants reported sharing to be. Murray-Swank (2006) reports a complex influence of religious disclosure and religious attachment styles; individuals with an insecure attachment being less spiritually committed but more frequent attendees at church and related functions. These individuals tend to experience more negative guilt related feelings as a result of disclosure than either groups which are non-spiritual / non-church attending or church attending and spiritual. Many religious people as well as representatives of the Catholic Church itself were complicit in the genocide with instances of priests facilitating the murder of their own congregation (Gourevitch, 1998). In the aftermath of 1994 the perception of having been betrayed or abandoned by the church presents a plausible

explanation of why individuals show such a pattern of insecure attachment to institutionalized religion.

3.4.5 Limitations

Several of the scales used in this study demonstrated unsatisfactory α reliabilities. A number of these have not previously been validated in African cultures and future research in Rwanda should consider adapting the present measures to more fully tap the variables under investigation.

The data were collected from an elite sample that has been able to attend university, limiting the generalizability of these findings to the majority of Rwandans. However, it is important to consider the impact of such educated groups have on the rest of society. Educated individuals, particularly this group who are training to be teachers, are important social agents and may be more likely to occupy positions of influence in their communities. Pham et al. (2004) demonstrated that education in Rwanda correlated negatively with openness to reconciliation. Given this past finding and the fact that the violence of 1994 was organized by an educated minority (Mamdani, 2001) this sample provides insight into a very important subsection of the population which should continue to be studied.

4 STUDY 2: INFORMATION PROCESSING STRUCTURES

4.1.1 Overview of Integrative Complexity and the Architecture of Assumptive Worlds

The cognitive processing of traumatic events is central in determining how much PTG is experienced above and beyond the experiential content of the life stressors (Calhoun, Tedeschi, Fulmar & Harlan, 2000). There is increasing recognition that it is not the specific events, as terrible as they may be, which are the most traumatizing but rather the internal disorganization and disintegration that follow from psychological un-preparedness (Janoff-Bulman, 2006). The information processing strategies used by survivors is an important corollary to both emotional and behavioural responses to life-threatening events (Suedfeld, 1997). The complexity of the structure of cognitions at pre-trauma, trauma, and post-trauma provides insights into aspects of information processing under stress. Holocaust survivors have demonstrated more complex information processing strategies following experiences of oppression and torment than either during or before. Complexity entails an individual's ability to monitor various sources of information, understand the relationship of multiple variables, make effective predictions and formulate multi-level strategies (Suedfeld, 1997; Streufert & Schroder, 1965). Integrative complexity is a continuous variable delineated along 7 levels based on two primary dimensions; the use of differentiation and, as complexity increases, the use of higher order / schematic integration (Baker-Brown et al., 1992). Differentiation can be present without integration, but integration requires that differentiation has taken place. For instance, a paragraph which explicitly identifies different motives for violence, greed and fear for example, would have differentiation. Direct acknowledgement in the same paragraph that these two motives are both exploited by political leaders in order to serve broader political ends would be an example of an

integrating principle. As the level of schematic understanding becomes more integrated and alternative ways of thinking are clearly considered, the overall integrative complexity of a paragraph increases (Suedfeld, 1997).

During extreme life crises the individual's ability to maintain a high level of cognitive processing is severely impeded. Various environmental factors have been shown to deplete the resources available for high levels of complexity (Suedfeld, Guttieri & Tetlock, 2005) with characteristic periods of resisting stressors followed by periods of exhaustion (Selye, 1956). This formulation has led to two hypotheses concerning integrative complexity. The first is the *cognitive manager hypothesis* which posits complexity as an index of a subtle cost-benefit analysis through which the individual determines the degree to which they will devote cognitive resources to dealing with a stressful situation. The second hypothesis is the *disruptive stress hypothesis* which states that continued exposure to stressors will drain the cognitive resources needed to respond to situations with a high level of complexity (Suedfeld, 1997, 1992).

Schema change models are complementary to the integrative complexity literature on cognitive processing following trauma. Janoff-Bulman (2005) posits 3 main pathways to PTG 1). Strength through suffering, 2). Existential re-evaluation and 3). Psychological preparation. The final pathway, psychological preparation, is most relevant to the structure of cognitive processes. Once schemas have formed, they are resistant to change and guide the way we categorize and process events in the world (Janoff-Bulman, 1992; Fiske, 2004). When these schemas are abruptly disrupted due to unforeseen and unpreventable events, individual 'assumptive worlds' are shattered, altering the way information is processed in drastic and lasting ways (Suedfeld, Tetlock & Ramirez, 1977). In the wake of highly traumatic 'seismic

events' there is substantial re-ordering of the content and the architecture of individuals' inner worlds (Tedeschi & Calhoun, 2004; Janoff-Bulman, 2006).

Like geological earthquakes, the personal devastation brought about by internally experienced trauma is very real and very painful, leaving very little un-disturbed. As a result of having experienced a devastating earthquake, more planful rebuilding takes place and the emergent structures tend to be made stronger to endure future seismic events (Tedeschi & Calhoun, 2000). This same tendency can be applied to individual growth and rebuilding after personal crises. There is a certain level of psychological increase, expansion and development in survivor's cognitive-emotional understanding of themselves and the world in which they operate (Janoff-Bulman, 2006). This understanding in many ways represents increases in the complexity of information processing. The period of existential angst and uncertainty following high levels of uncertainty and the sense of being unprepared for what one may encounter often leads to increased psychological preparation through which individuals integrate and transcend traumatic disorganization (Neimeyer, 2001).

Janoff-Bulman (2005) makes an argument for increased cognitive complexity very concisely. She states:

> Survivors' assumptive worlds are apt to become structurally more complex, essentially less simplistic and absolutist. Just as our schematic structures representing stereotypes become more complex through processes of sub grouping and sub typing (Fisk, 2002; Rothbart, Evans, M., & Fulero 1995), so too our broadest schemas can become more complex by encapsulating substructures related to the tragic traumatic event (p.145).

Suedfeld (1997) provides collaborative evidence in Holocaust survivors who show higher levels of integrative complexity following traumatic experience. Although some suffer post-traumatic

stress symptoms, a generally higher level of integrative complexity argues that these individuals do possess the cognitive strength necessary for survival and adaptation (Suedfeld, 1997).

The process of increasing information processing complexity is also reflected in Antonovsky's (1987) sense of coherence (SOC) model. Individuals confront trauma in terms of three main components (comprehensibility, manageability and meaning). Periods of extreme distress, such as genocide, make maintaining adequate levels of these components very unlikely and in many cases the basis for one's presumed coherence may never have been considered before. Following traumatic events individuals become more acutely aware of the presence or absence of comprehensibility, manageability and meaningfulness in various aspects of their lives. This awareness during the post-trauma period allows for a more integrated and cognitively complex view of the world to emerge, which in turn facilitates post-traumatic growth (Tedeschi & Calhoun, 1995, 2000, 2005; Almedom, 2005). Growth and loss are two sides of the same coin, as survivors conceptual structures grow less rigid and more complex the very same experience which was once the foundation of negative feelings can change from inducing anxiety to appreciation, dread to self confidence, sorrow to joy (Janoff-Bulman, 2006).

The structure of cognitive processing has also been shown to be an important variable for understanding political leadership strategies and decision making. Political leaders who have been forced to make important national choices demonstrate a pattern of initial decreasing in complexity followed by increases at post crisis periods (Suedfeld, 1992; Suedfeld et al. 2005). Furthermore, maintaining higher levels of complexity has been associated with the success of leadership decisions (Janis & Mann, 1991), whether they lead to conflict (Conway, Suedfeld & Tetlock, 2001) and how accepting of compromise leaders are (Staub, 1991). Cognitive processing during and following trauma remains a valuable area for continued research.

Study Design

Archival material was obtained from 4 separate sources. These were: 1). A series of Canadian National Film Board (NFB) documentaries which included interviews immediately following the genocide until approximately three years afterward. 2). Jean Hatzfield's (2005) collection of interviews with incarcerated génocidaires 3). Paul Rusesabagina (of *Hotel Rwanda* fame)'s autobiography including his experiences leading up to, during and following the genocide and, 4). A series of speeches and interviews with President and RPF leader Paul Kagame.

When 'pre-genocide' transcripts are discussed, this indicates sections of material written after the genocide, but where individuals discuss events or ideas from a period prior to the genocide. The use of such retrospective texts as a means of ascertaining complexity has been shown to correlate strongly with the analysis of texts actually collected pre-genocide (Suedfeld, Krell, Wiebe & Steel, 1996).

Random samples of 10 paragraphs were extracted from each source referring to the three time periods of interest (pre-genocide, genocide, post-genocide) and scored for integrative complexity (Baker-Brown, 1992). There was an inter-rater α reliability of .80 for paragraphs independently scored by certified integrative complexity scorers.

It was hypothesized that the analyses of the 4 target groups would provide evidence for decreased complexity of information processing during the genocide, and increased complexity in the time periods following beyond pre-genocide levels (Suedfeld, 1997; Janoff-Bulman, 2006).

4.2.1 Analysis 1: Integrative Complexity of Survivors and Killers

Testimonies from convicted Hutu perpetrators and Tutsi survivors were analyzed. When the time periods were collapsed, there was a significant difference between the overall mean complexity levels of perpetrators (M = 1.98) and survivors (M = 2.50), t (8) = 2.32, p =.05.

Within perpetrators, there were higher levels of complexity post-genocide (M = 2.40) than during genocide (M = 1.70), t (8) = 2.01, p < .05, or pre-genocide (M = 1.89), t (8) = 1.91, p =.05. In the Survivor sample, there were significant differences between complexity post-genocide (M = 3.22) compared to during genocide (M = 2.10), t (8) = 2.29, p < .05, or pre-genocide (M = 2.00), t (8) = 2.55, p =.04.

Table 2

Mean Integrative Complexity of Perpetrators and Survivors

(N = 60)	HUTU (perpetrators)	TUTSI (survivors)
PRE-GENOCIDE	1.89 (n = 10)	2.11 (n = 10)
GENOCIDE	1.70 (n = 10)	2.00 (n = 10)
POST- GENOCIDE	2.40 (n = 10)	3.22 (n = 10)

Source. *Machete Season* (Hatzfield, 2005)

4.3.1 Analysis 2: Integrative Complexity of Hutu and Tutsi Refugees

The findings from the analysis of perpetrators and survivors were partially replicated by findings based on CNFB (1995) documentary testimonies from Hutu and Tutsi not identified in regards to their roles in the genocide (thus not labelled as either perpetrators or victims). The results showed that during the genocide, Tutsis had significantly higher levels of complexity than did Hutus t (18) = 2.47, p =.02 (Tutsi M = 2.15; Hutu M = 1.00). Within Hutus, there was a

significant difference between genocide M = 1.00 and post-genocide (M = 2.62) levels of complexity t (18) = 3.87, p = .01. The difference between Tutsis at genocide and post-genocide was non – significant. There was insufficient data to analyse the pre-genocide time period.

Table 3

Mean Integrative Complexity of Hutu and Tutsi Refugees

(N = 47)	HUTU	TUTSI
GENOCIDE	1.00 (n = 10)	2.15 (n = 10)
POST- GENOCIDE	2.00 (n = 10)	2.62 (n = 10)

Source. National Film Board, 1997

4.4.1 Analysis 3: Integrative Complexity of Rwandan Leaders

Complexity scoring Paul Rusesabagina's account of the events surrounding the genocide indicated a substantial drop during the genocide and significantly higher levels of integrative complexity post-genocide (M = 3.90) than either pre-genocide (M = 3.20), t (9) = 2.54, p =.03 or genocide levels (M = 2.10), t (9) = 6.19, p = .001. Transcripts from Paul Kagame demonstrated higher complexity at post-genocide (M = 4.40) than at either pre-genocide M = 2.90, t (9) = 3.50, p =.007 or during the genocide (M = 4.15), t (9) = 4.88, p = .001 although did not display the same drop in complexity during the genocide.

Kagame's overall complexity scores (M = 3.47) were slightly higher than Rusesabagina's (M = 3.07) but there were no significant differences between the scores. Combined scores demonstrated the predicted pattern as at the individual level with higher complexity at post-genocide M = 4.15 than either pre-genocide (M = 3.05), t (9) = 2.85, p = .02 or genocide (M = 2.60), t (9) = 8.12, p = .001.

Table 4

Mean Integrative Complexity of Rwandan Leaders

N = 60	Paul Kagame	Paul Rusesabagina	Combined
Pre-genocide	2.90	3.20	3.05
Genocide	3.10	2.10	2.60
Post-genocide	4.40	3.90	4.15
Overall	3.47	3.07	

Source. *An Ordinary Man;* Rusesabagina, 2006; Presidential Speeches / Interviews, 1997-2007

4.5.1 Discussion

The hypothesized pattern of lowered complexity during genocide followed by increases over time was supported in 4 of 6 groups analyzed. All of the analysis demonstrated the hypothesized increases at the post-genocide time period compared to pre-genocide. The findings support cognitive resource models of information processing (Suedfeld, 1992; Selye, 1956). The exception to this pattern was Tutsi president Paul Kagame who showed no difference between complexity during the genocide and pre-genocide. It is not clear why Kagame showed slight increases in complexity rather than decreases; it may be the case his during his involvement in intense guerilla warfare he had experienced the 'benefit' of stress inoculation. Such experiences may have buffered him from a shattering of his assumptive world during the onset of the genocide (Mamdani, 2001; McGuire, 1990).

An alternate explanation for the absence of a significant drop in complexity in Tutsi participants may be the fact that Tutsis have been encouraged to tell their stories. This may be a result of increased retrospective complexity coming from discussions of genocide and having been able to form a more integrative narrative to explain their experiences during that time

(Niemeyer, 2001). Hutus were generally perpetrators and have not been given the same opportunity to engage in a public discourse concerning their experiences during the genocide, which may be reflected in their lower complexity scores while discussing the genocide period. This explanation would account for why the Tutsi refugees immediately following the genocide demonstrated the expected drops in complexity while those interviewed several years later did not. The effect of high levels of disclosure on integrative complexity during retrospective accounts of genocide deserves further attention. A more parsimonious explanation is that survival required more complex thought for survival and is thus more reflected in the Tutsi population which is comprised of survivors.

The absence of a drop in complexity in the speeches and interviews of President Kagame during the genocide may be due to the fact that the time period identified as pre-genocide referred any period before the actual genocide in beginning on April 6th, 1994. Kagame and the RPF had been involved in an invasion of Rwanda since 1990 and had suffered many traumatic events during that period. That the pre-genocide scores do not differ from genocide period scores may indicate that the effects of trauma already had the effect of lowering complexity. Had paragraphs which referred to a time when there was less violent persecution at all, the findings may have more clearly demonstrated the drop once a particularly traumatic period began. The consistent and significant increases in complexity across all groups at post-genocide demonstrates that once the persecution had been categorically stopped, a more complex cognitive structure aimed at understanding emerged.

The present findings provide cross-cultural support for the assumptive worlds hypothesis demonstrating that following extreme worldview disruption individuals tend to reformulate and adopt increasingly complex views of the world in which they live. The overall higher level of

integrative complexity post-genocide provides support for Janoff-Bulman's psychological preparedness and McGuire's (1990) model of stress inoculation. Stress inoculation takes as an analog the immune system; an individual who has been exposed to pathogens and has survived will have greater immunity against subsequent encounters with other pathogens. Having withstood the chaos of a traumatic event, individuals may dispel notions of invulnerability and just world thinking, while re-ordering the priority given to various aspects of their lives. Should another tragedy befall this person, they will not need to re-evaluate their worldview as extensively as the first time and in this sense are more immune to the destabilizing effects of stress. Such individuals would not be predicted to experience the same amount of PTG as a result of future trauma, but rather exemplify a more grounded resilience (Tedeschi & Calhoun, 2000; Bonanno, 2004; Suedfeld, 1977; Maddi, 2001).

Increased integrative complexity post-genocide was significant for perpetrators of genocide as well as those who were victims, suggesting that the shattering of the assumptive worldview is not solely an experience of victimization, but more generally an upheaval of basic assumptions about order and meaning in the world (Janoff-Bulman, 1992; Neimeyer, 2001). The significant differences between survivors and perpetrators is representative of the severity of the traumatic disruption, which is compatible with Suedfeld's (1992) disruptive stress hypothesis wherein trauma precipitates discrete changes in the structure of information processing (see also Janoff-Bulman, 1992; Tedeschi & Calhoun, 2005).

Of the three sample populations assessed, the time period of the refugee interviews was temporally much closer to the events of the genocide. This group demonstrated the lowest absolute complexity scores at post-genocide, which indicates an effect of temporal proximity to the traumatic events, although the trajectory toward higher levels of complexity was already

present at this early stage. At the time of giving account, members of this group were displaced from their homes and were still under the very real threat of militias invading from neighbouring countries and were experiencing the intense fallout from the genocide. The evident effect of time on this group indicates that a period of processing is needed to allow a re-establishing of coherent narratives and for processing the various components vital to assumptive worlds (Janoff-Bulman, 1989, 2005; Suedfeld, 1997; Almedom, 2005).

Finally, the leaders, Kagame and Rusesabagina, both demonstrated high levels of integrative complexity and demonstrated the same pattern of increased complexity post-genocide as the other groups. Both of these individuals have been acclaimed for their resourcefulness and appropriate responses during the genocide. Such successful decision-making supports the established link with higher levels of complexity (Suedfeld, 1992; Suedfeld, Bluck & Ballard, 1988; Janis & Mann, 1991).

4.5.2 Limitations

The proposed links among integrative complexity, assumptive world views and PTG have yet to be empirically established in the same sample. The pattern of post-traumatic increases across samples and the theoretical congruency with the rebuilding of a more complex assumptive world suggest that such a relationship is likely. It would be valuable to collect both questionnaire data and written paragraphs from the same sample in order to establish this relationship more concretely.

5 OVERALL CONCLUSIONS AND IMPLICATIONS

The demographic analyses showed significant differences between Hutu and Tutsi ethnic groups. These findings demonstrate that despite the RPF's dismissal of ethnic difference, there are in fact differences which deserve consideration. The experiences of Hutus and Tutsis are important aspects of a collective history and it may be counter-productive if these differences are not recognized solely because of political posturing (Neimeyer, 2005; Staub, 2006). Of particular interest is the presence of the Other group which did not identify their ethnicity, but were more vengeful, in favour of judicial systems and supportive of the government's right to use violence as a means to resolve conflicts than either self identified Hutus and Tutsis. It may be that this group in representative of a new sub-group which has internalized the popularized RPF doctrine. Although this group demonstrated higher vengeful attitudes which seem counter to a social atmosphere conducive to reconciliation, the faith placed in the government and support of the national plan may be what is required at this stage in the rebuilding process. Caution flags should be raised if this obedience is coupled with a regime which espouses divisionist or violent ideologies (Staub, 2006). Sub-groups in the population which show authoritarian tendencies should be monitored as the political leadership continues to change over time (Mgbako, 2005; Reyntjens, 2004).

The present research provides empirical evidence that survivors have been able to overcome extremely challenging life circumstances. This adds to the cross-cultural evidence of the extraordinary capacity of humans to rise form the ashes of devastation and shape meaningful lives (Cassels & Suedfeld, 2006). Such findings contribute to a more inclusive understanding of the fundamental human capacity to overcome and thrive following stressful life circumstances. The centrality of the SOC to PTG suggests that culturally specific beliefs and traditions may be

less important than the presence of some unified belief framework which individuals are free to engage with in a personally meaningful way. This view is consistent with the literature both from Rwanda and the West which emphasizes the centrality of the chaotic nature of trauma over bio-medical explanations (Rutembesa, 2002; Bagilishya, 2001; Antonovsky, 1987; Tedeschi & Calhoun, 2005; Janoff-Bulman, 2006). A more basic understanding of the human need for coherence should inform future interventions immediately following trauma and long-term healing projects. In these cases it makes sense that where cultural worldviews are established, interventions should use these frameworks as a basis for meaning reconstruction rather than introducing foreign systems.

Future research which explores the relationship between psychological variables and practical social strategies attempting to foster growth may provide a better understanding of what is involved in successful psycho-social outcomes. For instance, the present findings demonstrate that individuals with higher SOC do in fact support local justice and have a more positive orientation toward society. Such findings provide important corroborative evidence bridging observational and theoretical assessments of the success of the restorative justice programs from various disciplines (Kirkby, 2006; Staub, 2006).

That greater individual PTG is associated with more openness to reconciliation indicates the importance of individual healing as a path to social reconstruction. This corroborates the previous findings by Pham and colleagues (2004) linking PTSD with less openness to reconciliation. Future research should seek to further establish these links and explore evidence for a threshold along the continuum from distress to eustress where individuals, having experienced internal transformations begin to actively engage in social reconstruction.

Evidence from cognitive processing and schema reconstruction models provide support for the existence of universal aspects within traumatic and post-traumatic responding which have various cultural construals (Suedfeld, 1997; Janoff-Bulman, 2006). The analysis of cognitive architecture is a useful means to investigate basic elements of responses at various time periods and under a range of stress severity. Such research has implications for establishing psychosocial programs following traumatic events as well as monitoring the efficacy of interventions. Future research would benefit from continuing to consider the broader social/cognitive aspects of recovery aside from the immediate content involved in this process. Ongoing monitoring of various group-levels of complexity during periods of social rebuilding while comparing objective indices of social growth would serve to clarify the scope and relationship of personal and social transformations. This would provide an additional tool for the evaluation of political / social progress.

Overall the present research provides new insights into post conflict Rwanda and in doing so presents reasons for optimism. This example of post-traumatic growth provides yet another testament to the remarkable ability of humans to overcome the darkest events imaginable. Equally impressive are the demonstrations of large-scale social transformations in a relatively short period of time which have brought together victims and perpetrators to take part in the process of building hope for the future. It is certainly the case that Rwanda has provided and will no doubt continue to provide many cross-cultural lessons concerning human endurance and the individual and social capacity to rise from the ashes.

REFERENCES

Agger, I., & Jensen, S. B. (1990). Testimony as ritual and evidence in psychotherapy for political refugees. *Journal of Traumatic Stress, 3* (1), 115-130.

Almedom, A. M. (2005). Resilience, hardiness, sense of coherence, and posttraùmatic growth: All paths leading to 'light at the end of the tunnel'? *Journal of Loss & Trauma, 10*(3), 253-265.

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th edition). Washington: American Psychiatric Association.

Antonovsky, A. (1987). The salutogenic perspective: Toward a new view of health and illness. *Advances, 4*(1), 47-55.

Antonovsky, H., & Sagy, S. (1986). The development of a sense of coherence and its impact on responses to stress situations. *Journal of Social Psychology, 126*(2), 213-225.

Awwad, E. (1999). Between trauma and recovery: Some perspectives on Palestinian's vulnerability and adaptation. In K. Nader, N. Dubrow & B. H. Stamm (Eds.), *Honoring differences: Cultural issues in the treatment of trauma and loss.* (pp. 234-266). Philadelphia: Brunner/Mazel.

Bagilishya, D. (2000). Mourning and recovery from trauma: In Rwanda, tears flow within. *Transcultural Psychiatry, 37*(3), 337-353.

Baker-Brown. G. Ballard. E. J. Bluck. S. de Vries. B. Suedfeld. P. & Tetlock, P. E. (1992). The conceptual integrative complexity scoring manual. In C. P. Smith (Ed.). *Motivation and personality: Handbook of thematic content analysis* (pp. 400-418). New York: Cambridge Univ. Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological review, 84*(2), 191-215.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., et al. (1998). Multigenerational perspectives on coping with the holocaust experience: An attachment perspective for understanding the developmental sequelae of trauma across generations. *International Journal of Behavioral Development, 22*(2), 315-338.

Barsalou, L. W. (1988). The content and organization of autobiographical memories. In U. Neisser, & E. Winograd (Eds.), *Remembering reconsidered: Ecological and traditional approaches to the study of memory.* (pp. 193-243). Cambridge: Cambridge University Press.

Breslau, N. (2001). The epidemiology of posttraumatic stress disorder: What is the extent of the problem? *Journal of Clinical Psychiatry, 62*, 16-22.

Browning, D. (1992). Psychology in service of the church. *Journal of Psychology & Theology, 20*(2), 127-136.

Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59*(1), 20-28.

Bonanno, G. A., Noll, J.G., Putnam, F.W. (2003). Predicting the willingness to disclose childhood sexual abuse from measures of repressive coping and dissociative tendencies. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children, 8*, 302-318.

Bowlby, J. (1980). *Attachment and Loss.* New York: Basic Books Inc.

Byrne, B. (2003). Reciting the self: Narrative representations of the self in qualitative interviews. *Feminist Theory, 4*(1), 29-49.

Calhoun, L. G., & Tedeschi, R. G. (2001). Posttraumatic growth: The positive lessons of loss. In R. A. Neimeyer (Ed.), *Meaning reconstruction & the experience of loss.* (pp. 157-172). New York: American Psychiatric Association.

Carballo, M., Smajkic, A., Zeric, D., Dzidowska, M., Gebre-Medhin, J., & Van Halem, J. (2004). Mental health and coping in a war situation: The case of Bosnia and Herzegovina. *Journal of Biosocial Science, 36*(4), 463-477.

Cassels, L. & Suedfeld, P. (2006). Salutogenesis and autobiographical disclosure among Holocaust survivors. *Journal of Positive Psychology, 1*(4), 212-225.

Chauvin, L., Mugaju, J., & Comlavi, J. (1998). Evaluation of the psychosocial trauma recovery programme in Rwanda. *Evaluation and Program Planning, 21*(4), 385-392.

Cienfuegos, A. J. & Monelli, C. (1983). The testimony of political repression as a therapeutic instrument. *American Journal of Orthopsychiatry, 53*(1), 43-51.

Conway, L. G., III, Suedfeld, P., & Tetlock, P. E. (2001). Integrative complexity and political decisions that lead to war or peace. In D. J. Christie, R. V. Wagner & D. D. N. Winter (Eds.), *Peace, conflict, and violence: Peace psychology for the 21st century.* (pp. 66-75) New Jersey: Prentice Hall.

Corey, A., & Joireman, S.F. (2004). Retributive justice: The Gacaca courts in Rwanda. *African Affairs, 103*, 73-89.

Corey, A., & Joireman S.F. (2004). Should approaches to post-conflict justice and reconciliation be determined globally, nationally or locally? *The European Journal of Development Research, 17*(4), 735-752.

Costa, P. T., & McCrae, R. R. (1985). Hypochondriasis, neuroticism, and aging: When are somatic complaints unfounded? *American Psychologist, 40*(1), 19-28.

Cowan, P. A., Cowan, C. P., & Schulz, M. S..(1996). Thinking about risk and resilience in families. In E. M. Hetherington, & E. A. Blechman (Eds.), *Stress, coping, and resiliency in children and families.* (pp. 1-38). New Jersey: Lawrence Erlbaum Associates, Inc.

Daly, E. (2002). Between punitive and reconstructive justice: The Gacaca courts in Rwanda. *International Law and Politics, 50* (9), 355-399.

Dasberg, H. (2001). Adult child survivor syndrome on deprived childhoods of aging holocaust survivors. *Israel Journal of Psychiatry and Related Sciences, 38*(1), 13-26.

Dasberg, H., Bartura, J., & Amit, Y. (2001). Narrative group therapy with aging child survivors of the holocaust. *Israel Journal of Psychiatry and Related Sciences, 38*(1), 27-35.

Dawes, A., & Donald, D. (1994). Understanding the psychological consequences of adversity. In A. Dawes, & D. Donald (Eds.), *Childhood & adversity: Psychological perspectives from South African research.* (pp. 1-27). London: David Philip Publishers.

de Bruijn, M., van Dijk, R., & Foeken, D. (2001). *Mobile Africa: Changing patterns of movement in Africa and beyond.* Boston: Brill.

de la Rey, C. (2001). Reconciliation in divided societies. In D. J. Christie, R. V. Wagner & D. D. N. Winter (Eds.), *Peace, conflict, and violence: Peace psychology for the 21st century.* (pp. 251-261). New Jersey: Prentice Hall.

Diagnostic and statistical manual of mental disorders. (4th edition). (1994). Washington: American Psychiatric Association.

Des Forges, A. (1999). *Leave none to tell the story: Genocide in Rwanda.* New York: Viking.

Doka, K. (2002). How could God? Loss and the spiritual assumptive world. In J. Kauffman (Ed.), *Loss of the assumptive world: A theory of traumatic loss.* (pp. 49-54). Boston: Brunner-Routledge.

Eitinger, L. (1961). Pathology of the concentration camp syndrome: Preliminary report. *Archives of General Psychiatry, 5*, 371-379.

Falsetti, S. A., Resick, P. A., & Davis, J. L. (2003). Changes in religious beliefs following trauma. *Journal of Traumatic Stress, 16*(4), 391-398.

Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition & Emotion, 12*(2), 191-220.

Fiske, S. T. (2004). What's in a category?: Responsibility, intent, and the avoidability of bias against outgroups. In A. G. Miller (Ed.), *The social psychology of good and evil.* (pp. 127-140). London: Guilford Press.

Gore, S., & Eckenrode, J. (1996). Context and process in research on risk and resilience. In R. J. Haggerty, L. R. Sherrod, N. Garmezy & M. Rutter (Eds.), *Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and interventions.* (pp. 19-63). Cambridge: Cambridge University Press.

Gourevitch, P. (1998). *We wish to inform you that tomorrow we will be killed with our families: Stories from Rwanda.* New York: Picador.

Grana, S. (Producer), & Lacourse, D., & Patry, Y. (Writer/Director). (1996). *Sitting on a volcano* [Motion Picture].Canada: National Film Board of Canada.

Grana, S. (Producer), & Lacourse, D., & Patry, Y. (Writer/Director). (1996). *Hand of God, hand of the devil.* [Motion Picture].Canada: National Film Board of Canada.

Grana, S. (Producer), & Lacourse, D., & Patry, Y. (Writer/Director). (1996). *Chronicle of a genocide foretold: Part 1: Blood was flowing like a river.* [Motion Picture].Canada: National Film Board of Canada.

Grana, S. (Producer), & Lacourse, D., & Patry, Y. (Writer/Director). (1996). *Chronicle of a genocide foretold: Part 2: We were cowards*. [Motion Picture].Canada: National Film Board of Canada.

Grana, S. (Producer), & Lacourse, D., & Patry, Y. (Writer/Director). (1996). Chronicle *of a genocide foretold: Part 3: We feel betrayed*. [Motion Picture].Canada: National Film Board of Canada.

Harvey, M. R. (1996). An ecological view of psychological trauma and trauma recovery. *Journal of Traumatic Stress, 9*(1), 3-23.

Hatzfield, J. (2005). *Machete season : The killers in Rwanda speak* (1st American ed.). New York: Farrar, Straus and Giroux.

Herman, J. L. (1992). *Trauma and recovery.* New Jersey: Basic Books.

Hermans, H. J. M. (2001). Mixing and moving cultures require a dialogical self. *Human Development, 44*(1), 24-28.

Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of psychosomatic research, 11*(2), 213-218.

Human Rights Watch (2001). Uprooting the Rural Poor. *In Rwanda Human Rights Watch*. New York: Human Rights Watch.

Hundt, G. L., Chatty, D., Thabet, A. A., & Abuateya, H. (2004). Advocating multi-disciplinarity in studying complex emergencies: The limitations of a psychological approach to understanding how young people cope with prolonged conflict in Gaza. *Journal of Biosocial Science, 36*(4), 417-431.

Janis, I. L., & Mann, L. (1992). Cognitive complexity in international decision making. In P. Suedfeld, & P. E. Tetlock (Eds.), *Psychology and social policy.* (pp. 33-49). New York: Hemisphere Publishing Corp.

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition, 7*(2), 113-136.

Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma.* London: Free Press.

Janoff-Bulman, R. (2006). Schema-change perspectives on posttraumatic growth. In L. G. Calhoun, & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice.* (pp. 81-99). New Jersey: Erlbaum.

Janoff-Bulman, R., & Berg, M. (1998). Disillusionment and the creation of value: From traumatic losses to existential gains. In J. H. Harvey (Ed.), *Perspectives on loss: A sourcebook.* (pp. 35-47). New Jersey: Brunner/Mazel.

Kagame, P. (2006, September, 18). RUSI Nelson Mandela Lecture. Retrieved from http://www.rusi.org/events/ref:E44EC5DA215BFC/info:public/infoID:E450ECDBB49D83/

Kagame, P. (2004). Speech at the Woodrow Wilson Center for scholars. Retrieved from www.wilsoncenter.org/topics/docs/ACFAEB.doc

Kagame, P. (2001, April, 07). Genocide commemoration speech. Retrieved from http:// www.gov.rw /government/ resident/speeches/2001/04_07_01_dispora.html

Kagame, P. (2000, April, 22). Inaugural speech. Retrieved from http://news.bbc. co.uk/1/hi/world/africa/723090.stm

Kagame, P. (1999). Kagame interview with SPIEGEL. Retrieved from ervice.spiegel.de /cache/international/spiegel/0,1518,403586,00.html

Kagame, P. (1997). Kagame interview with Charles Obbo. Retrieved from www.charlesobbo.com/article143.html

Kenyon, G. (2005). Holocaust stories and narrative gerontology. *International Journal of Aging & Human Development, 60* (3), 249-254.

Kirkby, C. (2006). Rwanda's Gacaca courts: A preliminary critique. *Journal of African Law, 50* (2), 94-117.

Kleinman, A. (1988). *Rethinking Psychiatry: From cultural category to personal experience.* London: Free Press.

Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37*(1), 1-11.

Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of personality and social psychology, 42*(1), 168-177.

Kirkby, C. (2006). Rwanda's Gacaca courts: A preliminary critique. *Journal of African Law, 50*(2), 94-117.

Lange, A. (1996). Using writing assignments with families managing legacies of extreme traumas. *Journal of Family Therapy, 18*(4), 375-388.

Laub, D. (2002). Testimonies in the treatment of genocidal trauma. *Journal of Applied Psychoanalytic Studies, 4*(1), 63-87.

Lerner, R. M. (1980). Concepts of epigenesis: Descriptive and explanatory issues: A critique of Kitchener's comments. *Human Development, 23*(1), 63-72.

Lindström, B., & Eriksson, M. (2006). Contextualizing salutogenesis and Antonovsky in public health development. *Health Promotion International, 21*(3), 238-244.

Litz, B.T. (2005). Has resilience to severe trauma been underestimated? *American Psychologist*, 60, 262-275.

Long, W. J., & Brecke, P. (2003). *War and reconciliation: Reason and emotion in conflict resolution.* Boston: MIT Press.

Maddi, S. R. (1988). On the problem of accepting facticity and pursuing possibility. In Stanley B., Sass, L.A., Woolfolk, R.L. (Eds.). *Hermeneutics and psychological theory: Interpretive perspectives on personality, psychotherapy* (pp. 182-209). New Brunswick, NJ: Rutgers University Press.

Maddi, S. R. (2005). On hardiness and other pathways to resilience. *American Psychologist, 60*, 261-262.

Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting Psychology Journal: Practice and Research, 54*, 175-185.

Mamdani, M. (2001). *When victims become killers: Colonialism, Nativism, and the genocide in Rwanda.* New Jersey: Princeton University Press.

Mandler, G. (1984). Consciousness, imagery, and emotion with special reference to autonomic imagery. *Journal of Mental Imagery, 8*(4), 87-94.

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatisation: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*(1), 131-149.

McGuire, B. (1990). Post-traumatic stress disorder: A review. *Irish Journal of Psychology, 11*(1), 1-23.

Mgbako, C. (2005). Ingando solidarity camps: Reconciliation and political indoctrination in post-genocide Rwanda. *Harvard Human Rights Journal, 18,* 201-225.

Murray-Swank, A. B., Lucksted, A., Medoff, D. R., Yang, Y., Wohlheiter, K., & Dixon, L. B. (2006). Religiosity, psychosocial adjustment, and subjective burden of persons who care for those with mental illness. *Psychiatric Services, 57*(3), 361-365.

Nadeau, L. (2005). Stereotyping: The politics of representation. *Transcultural Psychiatry, 42*(3), 510-511.

Neimeyer, G. J. (2005). The tower of Babel: Different tongues toward a common vision. *Journal of Constructivist Psychology, 18*(3), 275-280.

Neimeyer, R. A. (2000). Narrative disruptions in the construction of the self. In R. A. Neimeyer, & J. D. Raskin (Eds.), *Constructions of disorder: Meaning-making frameworks for psychotherapy.* (pp. 207-242). Washington: American Psychological Association.

Neimeyer, R. A. (2005). Tragedy and transformation: Meaning reconstruction in the wake of traumatic loss. In S. Heilman (Ed.), *Death, bereavement, and mourning.* (pp. 121-134). New Jersey: Transaction Publishers.

Neimeyer, R. A., & Levitt, H. (2001). Coping and coherence: A narrative perspective on resilience. In C. R. Snyder (Ed.), *Coping with stress: Effective people and processes.* (pp. 47-67). Oxford: Oxford University Press.

Neimeyer, R. A., & Mahoney, M. J. (1995). *Constructivism in psychotherapy.* Washington: American Psychological Association.

Neimeyer, R. A., & Raskin, J. D. (2000). *Constructions of disorder: Meaning-making frameworks for psychotherapy.* New York: American Psychological Association.

Pargament, K. I., Desai, K. M., & McConnell, K. M. (2006). Spirituality: A pathway to posttraumatic growth or decline? In L. G. Calhoun, & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice,* (pp. 121-137). New Jersey: Erlbaum.

Park, C. L. (1998). Implications of posttraumatic growth for individuals. In R. G. Tedeschi, C. L. Park & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis.* (pp. 153-177). New Jersey: Erlbaum.

Parkes, C. M. (1971). Psycho-social transitions: A field for study. *Social Science & Medicine, 5*(2), 101-115.

Peddle, N., Monteiro, C., Guluma, V., & Macaulay, T. E. A. (1999). Trauma, loss, and resilience in Africa: A psychosocial community based approach to culturally sensitive healing. In K. Nader, N. Dubrow & B. H. Stamm (Eds.), *Honoring differences: Cultural issues in the treatment of trauma and loss* (pp. 121-149). NJ: Brunner/Mazel.

Pennebaker, J. W., Barger, S. D., & Tiebout, J. (1989). Disclosure of traumas and health among Holocaust survivors. *Psychosomatic Medicine, 51*(5), 577-589.

Pennebaker, J. W., & Francis, M. E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognition & Emotion, 10*(6), 601-626.

Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology, 55*(10), 1243-1254.

Powell, S., Rosner, R., Butollo, W., Tedeschi, R. G., & Calhoun, L. G. (2003). Posttraumatic growth after war: A study with former refugees and displaced people in Sarajevo. *Journal of Clinical Psychology, 59*(1), 71-83.

Powley, E. (2006). Rwanda: The impact of women legislators on policy outcomes affecting children and families. In: *The State of the World's Children 2007.* New York: UNICEF.

Pham, P. N., Weinstein, H. M., & Longman, T. (2004). Trauma and PTSD symptoms in Rwanda: Implications for attitudes toward justice and reconciliation. *JAMA: Journal of the American Medical Association, 292*(5), 602-612.

Resnick, G., & Burt, M. R. (1996). Youth at risk: Definitions and implications for service delivery. *American Journal of Orthopsychiatry, 66*(2), 172-188.

Reyntjens, F. (2004). Rwanda ten years on: From genocide to dictatorship. *African Affairs, 103,* 177–210.

Rhodes, G., Allen, G. J., Nowinski, J., & Cillessen, A. H. N. (2003). The violent socialization scale: Development and initial validation. In L. Athens, & J. T. Ulmer (Eds.), *Violent acts and violentization: Assessing, applying, and developing Lonnie Athens' theories.* (pp. 125-145). New Jersey: Elsevier Science/JAI Press.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rothbart, M., Evans, M., & Fulero, S. (1979). Recall for confirming events: Memory processes and the maintenance of social stereotypes. *Journal of Experimental Social Psychology, 15*(4), 343-355.

Rusesabagina, P., Zoellener, T. (2006). *An ordinary man.* New York: Viking.

Rutembesa, F., Semujanga, J., Anastase, S., [eds.]. (2003). *Rwanda: Identite et citoyennete.* Butare: Editions de l'Universite Nationale du Rwanda.

Rynearson, E. K. (2001). *Retelling violent death.* New York: Brunner-Routledge.

Sarkin, J. (2001). The tension between justice and reconciliation in Rwanda: Politics, human rights due process and the role of the Gacaca courts in dealing with the genocide. *Journal of African Law, 45,* 143-172.

Schoutrop, M. J. A., Lange, A., Hanewald, G., Davidovich, U., & Salomon, H. (2002). Structured writing and processing major stressful events: A controlled trial. *Psychotherapy and psychosomatics, 71*(3), 151-157.

Selye, H. (1956). *The stress of life.* New Jersey: McGraw-Hill.

Staub, E. (1989). *The roots of evil: The origins of genocide and Other group violence.* Cambridge England: Cambridge University Press.

Staub, E. (2003). *The psychology of good and evil : Why children, adults, and groups help and harm others*. Cambridge: Cambridge University Press.

Staub, E. (2005). The roots of goodness: The fulfillment of basic human needs and the development of caring, helping and nonaggression, inclusive caring, moral courage, active by-standership, and altruism born of suffering. In G. Carlo, & C. P. Edwards (Eds.), *Moral motivation through the life span.* (pp. 33-72). Nebraska: University of Nebraska Press.

Staub, E. (2006). Reconciliation after genocide, mass killing, or intractable conflict: Understanding the roots of violence, psychological recovery, and steps toward a general theory. *Political Psychology, 27*(6), 867-894.

Staub, E., & Pearlman, L. A. (2006). Advancing healing and reconciliation. In L. Barbanel, & R. J. Sternberg (Eds.), *Psychological interventions in times of crisis.* (pp. 213-243). New Jersey: Springer.

Stuckless, N. & Goranson, R. (1992). The vengeance scale: Development of a new measurement of attitudes towards revenge. *Journal of Social Behavior and Personality, 7*(1), 25-42.

Streufert, S., & Schroder, H. M. (1965). Conceptual structure, environmental complexity and task performance. *Journal of Experimental Research in Personality, 1*(2), 132-137.

Strümpfer, D. J. W. (1995). The origins of health and strength: From 'salutogenesis' to 'fortigenesis'. *South African Journal of Psychology, 25*(2), 81-89.

Summerfield, D. (1999). A critique of seven assumptions behind psychological trauma programmes in war-affected areas. *Social Science & Medicine, 48*(10), 1449-1462.

Suedfeld, P. (1992). Cognitive managers and their critics. *Political Psychology, 13*(3), 435-453.

Suedfeld, P. (1997). Reactions to societal trauma: Distress and/or eustress. *Political Psychology, 18*(4), 849-861.

Suedfeld, P., Bluck, S., Ballard, E. J., & Baker-Brown, G. (1990). Canadian federal elections: Motive profiles and integrative complexity in political speeches and popular media. *Canadian Journal of Behavioural Science, 22*(1), 26-36.

Suedfeld, P., Guttieri, K., & Tetlock, P. E. (2005). Assessing integrative complexity at a distance: Archival analyses of thinking and decision making. In J. M. Post (Ed.), *The psychological assessment of political leaders: With profiles of Saddam Hussein and Bill Clinton.* (pp. 246-270). Michigan: The University of Michigan Press.

Suedfeld, P., Krell, R., Wiebe, R. E., Steel, G. D. (1996). Coping strategies in the narratives of Holocaust survivors. *Anxiety Stress and Coping, 10,* 153-179.

Suedfeld, P., & Pennebaker, J. W. (1997). Health outcomes and cognitive aspects of recalled negative life events. *Psychosomatic medicine, 59*(2), 172-177.

Taylor, C. (1999). *Sacrifice as terror: The Rwandan genocide of 1994.* Birmingham: Berg Press.

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological bulletin, 103*(2), 193-210.

Tedeschi, R. G., & Calhoun, L. G. (2004). Target article: 'posttraumatic growth: Conceptual foundations and empirical evidence'. *Psychological Inquiry, 15*(1), 1-18.

Tedeschi, R. G., & Calhoun, L. G. (2005). Special issue: Editorial note. *Traumatology, 11*(4), 207-208.

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (1998). Posttraumatic growth: Conceptual issues. In R. G. Tedeschi, C. L. Park & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis.* (pp. 1-22). New Jersey: Erlbaum.

Tiemessen, A.E., (2004). After Arusha: Gacaca justice in post-genocide Rwanda. *African Studies Quarterly, 8*(1), 57-76.

UNICEF (1997). *Rwanda programme. Progress report.* No.4 January to December. Kigali: UNICEF.

Uvin, P., Mironko, C. (2003). Western and local approaches to justice in Rwanda, *Global Governance,* 9, 172-195.

van der Kolk, Bessel A., McFarlane, A. C., van der Hart, O., & Rice-Smith, E. (1999). Treatment of posttraumatic stress disorder and other trauma-related disorders. In D. Spiegel (Ed.), *Efficacy and cost-effectiveness of psychotherapy.* (pp. 63-83). New York: American Psychiatric Publishing.

Volkan, V.D. (1998). *Bloodlines: From ethnic pride to ethnic terrorism.* Colorado: Westview Books.

Weinberger, D.A., Schwartz, G.E., Davidson, R. J. (1979) Low-anxious, high-anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. *Journal of Abnormal Psychology, 88,* 369-380.

Weine, S. M., Becker, D. F., Vojvoda, D., Hodzic, E., Sawyer, M., Hyman, L., et al. (1998). Individual change after genocide in Bosnian survivors of 'ethnic cleansing': Assessing personality dysfunction. *Journal of Traumatic Stress, 11*(1), 147-153.

Westwood, M. J., Keats, P. A., & Wilensky, P. (2003). Therapeutic enactment: Integrating individual and group counseling models for change. *Journal for Specialists in Group Work, 28*(2), 122-138.

White, M., & Epston, D. (1989). *Literate means to therapeutic ends.* New Jersey: Dulwich Centre Publications.

Worthman, C. (2002). The world through different eyes: Mental imagery, writing, and the reconceptualization of the self and other. In K. S. Fleckenstein, L. T. Calendrillo & D. A. Worley (Eds.), *Language and image in the reading-writing classroom: Teaching vision.* (pp. 85-101). New Jersey: Erlbaum.

Wright, S. D., Pratt, C. C., & Schmall, V. L. (1985). Spiritual support for caregivers of dementia patients. *Journal of Religion & Health, 24*(1), 31-38.

APPENDICES

Appendix 1

Note: Absolute values for PTG scores are given. Scores are based on 21 items scored on a 6 point Likert scale with the highest possible score being 126. The mean level of PTG for the present sample was 87.86.

Mean Reported Scores on the PTGI in Different Studies

Study	Subjects	Presumed level of stress in comparison to other studies	Scoring system of standard PTGI scoring (0,1,2,3,4,5), mean	Mean PTGI score (transformed from nonstandard scale where necessary[a])
Tedeschi & Calhoun (1996) first study	Students with no stressful events	low		M = 69.75
Tedeschi & Calhoun (1996) first study	Students who had experienced stressful events such as relationship breakup and other stressful events	medium		M = 85.16
Calhoun & Cann, Tedeschi & M. Michael (1998)	Students who had experienced a major traumatic event	medium		M = 76.5
Calhoun & Cann (1994) first study	Students who stated that they had experienced a significant negative life event	medium		M = 75.18 for women; M = 67.72 for men
Manzi et al. & Langens (2003)	Dresden bombing night victims 50 years later	high	Three point scoring (1,2,3)[b] M = 48.2	M = 69.3
Potash & Esprey (2000)	Parents who had lost a child	high	6-point scale scored from 1 to 6. M = 83.5 for mothers; 79.3 for fathers	Ms = 62.5 and 58.1 respectively.
Pretzer (2000)	Criminal victimization in an urban community in South Africa	high	6 point scale scored from 1 to 6 M = 61.3	M = 40.3

Note. PTGI = Posttraumatic Growth Inventory
[a]Transformations of this kind should be treated with caution.
[b]Personal communication, January 2001

Appendix 2.

Crime categories (Kirkby, 2006)

	Category 1	*Category 2*	*Category 3*
Jurisdiction	ICTR or Public Prosecutor	Sector and Court of Appeal	Cell
Crimes	1 – Planners, organizers, inciters, supervisors and leaders of genocide or crimes against humanity; 2 – Leader of government organ, police, militia, church, etc. who committed or incited to commit; and accomplices 3 – Well-known murderers; 4 – Torturers; 5 – Rapists or abusers of sexual organs; 6 – Persons who dehumanized the dead. (and their accomplices)	1 – Murder, or serious assault causing death; 2 – Attack or serious assault; intending, but not causing, death; 3 – Committed other offences but without intention to kill (and their accomplices).	1 – Offences against property.
Penalties in years (youth: 14–18 years old)	No confession: life imprisonment or death penalty (10–20) Confess before listing: prison sentence for 25–30 (8–10)	"1" *or* "2" *crimes* No confession: 25–30 (8–10) Confess after listing: 12–15 (6–7.5)* Confess before listing: 7–12 (3.5–6)* "3" *crimes* No confession: 5–7 (2.5–3.5)* Confess after listing: 3–5 (1.5–2.5)* Confess before listing: 1–3 (0.5–1.5)*	Civil reparations for damage: restitution or equivalent in forced work