Post-Traumatic Stress Disorder Symptoms in South African Exiles

By

Vuyo Boniswa N. Mpumlwana

A Dissertation Submitted to The Faculty of Graduate Studies
in Partial Fulfillment of the Requirements for the
Doctor of Philosophy in Psychology

Department of Psychology
University of Manitoba
Winnipeg, Manitoba

May, 1991

ISBN 0-315-76994-7

POST-TRAUMATIC STRESS DISORDER

SYMPTOMS IN SOUTH AFRICAN EXILES

BY

VUYO BONISWA N. MPUMLWANA

A thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of

DOCTOR OF PHILOSOPHY

TABLE OF CONTENTS

Abstract

The present study investigated the relationship between various traumatic experiences and the psychological adjustment of 205 South African refugees who were residents of Mazimbu and Dakawa, African National Congress sponsored camps in Tanzania. The mediating effects of various variables (e.g., personality, social support, and recent life events) in this trauma-adjustment relationship were examined.

Thirty-three percent of the exiles had experienced physical or psychological torture (almost all of them both) while in political detention in South African prisons. Additional traumatic events had been experienced during South African military raids in front line states (19%). Police crackdowns on political demonstrations had lead to 9% being injured personally, 22% having close friends or relatives injured or killed, and 31% having witnessed others getting killed or injured. In all, two-thirds of the exiles had experienced one or more of the above experiences.

The General Severity Index (GSI) of the Symptom Checklist-90 (Revised) indicated overall levels of psychological symptomatology in these exiles closer (although significantly less) to those of psychiatric outpatients in Derogatis et al.'s (1973) normative sample while significantly exceeding those of Hmong refugees in the

U.S. (Westermeyer et al., 1984) and African university students in Canada (Mpumlwana, 1985). While torture experiences related to increased reports of symptoms in the six months after detention, they were not associated with increased current GSIs or scores on the CR-PTSD scale, a scale to measure post-traumatic stress disorder symptoms derived from the SCL-90-R. More physical torture experiences predicted who amongst those tortured would select torture as their most traumatic experience; within that group, however, more psychological torture methods predicted heightened intrusive thoughts and associated avoidance. One demonstration experience (seeing others hurt or killed) was modestly associated with elevated GSI and CR-PTSD scores; experience of military raids showed no effects on these measures.

Eysenck Personality Questionnaire-Revised (EPQ-R; Eysenck et al., 1985) Neuroticism was significantly and substantially related with current GSI and CR-PTSD scores. Other EPQ-R scales showed more modest associations with these measures. More recent negative life events and perceptions of social support were not related to current adjustment.

This study provided little evidence, surprisingly, for a relationship between the sorts of traumatic experiences assessed in these exiles and their current adjustment. Ofii the variables assessed in the current study, personality

attributes, particularly Neuroticism, were most significantly related to psychological wellbeing. The results are discussed in terms of the adequacy of current methodology and theory.

ACKNOWLEGDEMENTS

First and foremost, I give glory to the Lord for the successful completion of this thesis. A special word of thanks is extended to all South Africans who participated in this study, and to the leaders of the African National Congress for granting me permission to collect data from the villages of Mazimbu and Dakawa. There are a number of people to whom I am truly indebted. First, I would like to thank my family, particularly my 77 year- old mother Mrs. Nomonde Mpumlwana. My mother expressed her love and support for me in a unique way. Two years ago, as I was getting ready to leave for East Africa, my mother offered to come to Winnipeg in the middle of winter and looked after my children. I thank my three daughters Nomthandazo, Phumela, and Nompumelelo for being patient with me during the times when I could not be efficient in my parenting role because of graduate school pressure. Also, I am very grateful to my two brothers Loyiso and Malusi for their financial and moral support during and shortly after my trip to East Africa. Second, I pay a special tribute to Dr. John Schallow, my supervisor and a family friend who throughout my graduate school years was consistently and significantly supportive. Dr. Schallow's genuine support was mostly appreciated during the three months of my stay in Tanzania, East Africa when he regularly checked on my children and provided for their

basic needs. Third, a note of appreciation is extended to Dr. Vicky Wolfe of the Victoria Hospital, London, Ontario who was helpful with her expertise. Finally, I would like to thank the Ford Foundation for donating generously a grant which enabled me to carry out this study. Also, I am grateful for the World Health Organization's fellowship as well as the material support from the International Defence & Aid Fund of London, United Kingdom.

TABLES

INTRODUCTION

Very little has been written on the long-term psychological effects of persecution in today's South Africa. Before proceeding to explain the methods and design of the present study, it is necessary to present the historical background and the clinical assumptions which underlie the hypotheses and approach of this thesis.

South African Apartheid (apart-heid: Afrikaans word which refers to the policy of separation) presents a complex set of problems to those people who must live under its repressive and violent regime. There is no doubt that the enforced laws of the Apartheid system has produced a traumatized nation in South Africa. Many persons, for example, have experienced both physical and psychological torture in prison settings. Others have experienced daily harassment from the police force and have been confronted violently by the army with bullets and tear gas during mass demonstrations. The purpose of this study was to examine the psychological adjustment of South African refugees who have fled South Africa in relation to their traumatic experiences under Apartheid.

The introduction to this thesis briefly outlines some of the pressures which resulted in a decision to escape South Africa and the difficulties these refugees faced under the repressive system and detention laws of the Apartheid. The discussion will focus on traumatic experiences such as

torture during detention and police brutality in response to public demonstrations. Psychological problems associated with exile life (including traumatic experiences during military raids) are discussed as well as the mediating factors, such as personality and social support, which may play a role in the process of coping with traumatic experience.

This introductory section deals mainly with the clinical lore and theories about refugees, torture survivors, and coping with related stressors. These clinical assumptions are sketched as a preliminary to a review of existing empirical studies and the formulation of the hypotheses underlying the research presented in this thesis.

Life Under the Apartheid System

The White minority regime of South Africa introduced and maintained for over forty years racial laws which emphasize both the dominance of the Whites and the divide and rule principle. The divide and rule policy consists in promoting divisions among the indigenous people of South Africa along dialectic, ethnic, and regional lines. The main goal of these repressive racial laws is to maintain the White Afrikaner rule. The state strives to prevent and subdue any resistance. These laws and practises have an aversive impact on the daily lives of persons categorized by the regime as not belonging to the members of the White

ruling community. The oppressed majority includes Africans, so-called Coloureds, and Indians. The Group Areas Act of 1913, which can be viewed as the historical foundation of Apartheid system, gives total right to the white minority group to 85% of the land while 13% barren land is reserved for the Africans, 75% of the population. This Act restricts the freedom of movement for Africans such that their choice of where to live and work is extremely limited. The influx control mechanisms used insure that only the economically useful (predominantly men) are given access to the white areas (mainly towns) while the appendages (dependent wives and children) are compelled by law to remain in the rural areas. The South African regime uses various strategies to enforce the Apartheid laws. For example, Africans are obliged to produce, on police demand, documents which permit the holder to be in a certain geographic area at a particular time. Failure to comply results to physical and psychological abuse and/or arrest.

To explain the repressive nature of Apartheid, Mzimela (1983) compared the situation of the Jews in 1930s' Germany and the African people in today's South Africa. Mzimela noted that Voster, who later became Prime Minister from 1966 to 1978, was actually interned for two years during the Second World War for pro-Nazi sabotage. In the early 1940s Voster discussed the Apartheid system as follows, "You can call this anti-democratic principle dictatorship if you

wish. In Italy it is called Fascism, in Germany National Socialism, and in South Africa CHRISTIAN NATIONALISM!" (see Dommisse, 1987, p. 750; emphasis in original). Dommisse noted that the South African government has used the same names for several of its race-policies as used in the Nazi-ruled Germany. Similar restrictions have been placed on the Africans as were placed on the Jews. Domisse (1987) observed that:

> The most chilling similarity lies in the potential 'final solution to the native problem'. The Africans have also been placed in isolated camps and ghettos (euphemistically called 'homelands'), where they serve as reservoirs of cheap labor, where the children are starving to death by the tens of thousands annually, and where, when the chips are down, South Africa's small nuclear bombs, built in collaboration with Israel, the U.S. and West Germany, can be used with minimal damage to White South Africa. (p. 750)

As the indigenous people of South Africa began to organize their resistance to oppression and exploitation, their repression by the Apartheid government increased to alarming proportions. For example, Chikane (1986) reported that a 1984 revolt in the Vaal Triangle resulted in a bloody confrontation between the state police and the people. According to Chikane, about 7000 police and troops besieged

the Vaal townships (townships is a term used to refer to urban African residences in South Africa), and raided houses to crush the people's resistance to repression. The usual methods of resistance against Apartheid include mass demonstrations, and school, work, public transport, and consumer boycotts. The South African regime often responds to the mass demonstrations and boycotts with teargas, whipping, arrests, and rifle shots at those who are participating. In discussing the life under apartheid Chikane (1986) described the Republic of South Africa as:

> ...a world where people simply disappear, where parents are assassinated and homes are petrol bombed. .[The children] are learning a different set of survival. Children spend their time thinking and planning how to outwit the security forces and to take defensive action. (p. 343)

South African Laws of Repression

Evidence of torture within South African prisons is dated back to the Seventeenth and Eighteenth Centuries. This was the time when South Africa was colonized by the Dutch and later by the British. Records of torture are found in various historical documents. For example, H.G.V. Leibbrandt, in his journals (1699-1732), reported the following cases: "March 23 - The accused brought to the torture in the presence of the full Court of justice. A 50 pound weight was suspended from each of his great toes, but

though he confessed nothing of what was required." (quoted in Rudolph, 1984, p. 206). In 1795 torture (which in most cases lead to execution of the victim), was condemned and abolished by the then British colonial governor, but only in terms of the state laws, since it has continued to be practised anyway (Rudolph, 1984).

In today's South Africa, torture remains one of the central methods of maintaining law and order. For example, Section 6 of the Terrorism Act of 1967, and Section 29 of the Internal Act of 1982, to mention but a few, give the security police power to indefinitely detain people incommunicado without any charges being laid against them (Amnesty International, 1984; African National Congress of South Africa, 1984; Foster, Davis, & Sandler, 1987; & Rudolph, 1984). When detainees are held under these provisions, they are kept in solitary confinement. Their relatives, friends, lawyers, and family doctors are not allowed to visit or communicate with them in any manner. The detainees held under these laws are virtually at the mercy of their captors and the jurisdiction of courts to intervene is extremely limited. Moreover, the public is not entitled to information regarding the destiny of such persons (Foster et al., 1987 ; Rudolph, 1984).

While kept in solitary confinement, the detainees held under the various South African laws are commonly interrogated for long hours without rest (Amnesty

International, 1984; Foster et. al., 1987; Rudolph, 1984). Interrogation does not only involve questioning and coercing the victims to sign false statements prepared by the government, it also involves various brutal methods of physical and psychological torture.

Foster, Davis, and Sandler (1987) conducted a survey among 157 ex-detainees in South Africa. The interviews were carried out between mid-1983 to November 1984 by nine interviewers who were trained by Foster and colleagues in the use of an interview schedule. The main purpose of the study was to examine in detail the events, conditions, and psychological processes associated with detention practices in that country. Results of this study give full account of pre-detention and detention conditions. Pre-detention conditions included raids, being followed, and intimidation of family members by the police. The manner with which these ex-detainees were arrested was aggressive, rough or violent (according to 45% of the respondents). The average time period in detention was 132 days. Fifty percent of the detainees were detained several times. The number of interrogation sessions experienced by the detainees varied widely between 1 and 40, with the majority of the sample distributed almost equally over the smaller category of sessions, as well as more than 11 sessions. On the average, the length of time for each session was 6.6 hours. An average of three people were used as interrogators, while

17% of the victims reported that a team of five or more people were involved in the interrogation. Both psychological and physical forms of torture were experienced by all respondents during interrogation sessions.

Torture, a Dehumanizing Act of Violence

The General Assembly of the United Nations unanimously adopted Article One of the Declaration against Torture on December 9, 1975 (Amnesty International, 1984), which defines torture as follows:

> 1. For the purpose of this Declaration, torture means any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted by or at the instigation of a public official on a person for such purposes as obtaining from him or a third person information or confession, punishing him for an act he has committed, or intimidating him or other persons. It does not include pain or suffering arising only from, inherent in or incidental to, lawful sanctions to the extent consistent with the Standard Minimum Rules for the Treatment of Prisoners. 2.Torture constitutes an aggravated and deliberate form of cruel, inhuman or degrading treatment or punishment." (p. 13)

Foster, Davis, and Sandler, (1987) argued that this United Nations' definition is limited. On the basis of

their South African experiences, they suggested that the definition of psychological torture should include:

> . . . some notion of distorted communication techniques, vicarious forms of abuse such as those involving witnessing other persons' maltreatment, and psychological devices that have been shown to weaken or disorient basic mental and emotional function or emotionally stable forms of thought or action. (p. 105)

Also included in their expanded definition, as a third criterion, is "treatment such as solitary confinement, sleep deprivation, hooding and blindfolding, and administration of drugs" (p. 105). Torture is a dehumanizing act of violence used by the most repressive regimes of the world. The purpose of using torture is to protect the regime's status quo against a group, different from that of the ruling class, racially or historically, religiously and/or ideologically, and perceived by the regime as a threat or potential threat to its survival. In South Africa, torture is mostly reserved for Africans who are now demanding basic civil rights such as their right to vote. Such demands threaten the policy of Apartheid. Although in other countries torture is often practised on prisoners of war to obtain information about the enemy force or strategies, its goal in the Republic of South Africa could have a slightly different emphasis. The main focus of torture seems to lie

in weakening, eliminating, or preventing any future opposition against Apartheid. Genefke (in Ritterman, 1985) concluded that "The purpose of torture is not primarily to extract information . . . it is to destroy the victim's personality, to break down, to create guilt and shame, to assure that he never again be a leader." (p. 44)

Journey to Exile

Partly due to harassment and traumatic experiences, a number of South Africans have had to flee and take refuge in the neighbouring countries of Lesotho, Swaziland, Botswana, Zimbabwe, Zambia, Tanzania, and Mozambique. For most refugees the involuntary movement from South Africa to exile is usually sudden and unpredictable. Because decisions to leave are made in a short space of time varying from a day to two months depending on one's situation, it is most likely that people leave without being psychologically prepared for the new and unknown world.

The implications of going to exile for South Africans (as it is for most refugees) are that they leave behind their culture and its values, their families and close friends, that is, their roots. Some of the psychological difficulties associated with uprooting become more apparent during the last few hours before people leave for the unknown world. Conflicts between strong motivation to flee and sadness which gripes their hearts as they think of leaving home are often experienced by those who plan to go

into exile, thereby causing great ambivalence about whether to leave or to stay and resist oppression from within the country. A South African refugee in Canada whom I saw in therapy at the Psychological Service Centre at the University of Manitoba shared her experience of leaving her country as follows:

> ...On the day I had to leave I felt very sad, I couldn't cry because that was regarded as a sign of weakness by my comrades. I felt like taking the next train to visit my parents, at least to bid them farewell... but I couldn't face the thought.. couldn't (pause).

In addition to the painful feelings people experience as they leave the country, there is fear that if they are caught by the South African army who patrol the border that they may be arrested or killed. In such a case, their relatives might never know about their whereabouts. While South African refugees often breathe a sigh of relief when they arrive in their first country of asylum, the honeymoon period is usually shortened by such realities as being accommodated in a refugee camp, put into detention, or facing deportation.

Life as a Refugee

As already noted above, the southern African "front line" states often serve as the first country of asylum to many South Africans who flee into exile. While still in

these neighbouring countries, it has been a common practise for the South African regime to send its army after the refugees to terrorize, raid, and massacre them. For example, on December 9, 1982 the South African army invaded Maseru, the capital city of Lesotho, and murdered 28 South African refugees and 12 Basotho citizens. There have been several other attacks on the southern African countries by the South African army which aimed at assassinating South African exiles (ANC Newsbriefing, May 7, 1989). Also, some of the neighbouring countries collaborate with the Apartheid regime by detaining and deporting refugees to South Africa.

While some refugees immigrate from these neighboring countries to settle in other countries further away from South Africa, others join a liberation movement and live as a community in an organized camp or village. The African National Congress of South Africa (ANC), a liberation movement which leads the anti-Apartheid struggle, has organized such villages located within the front line states. The refugees who lived within the two established ANC villages of Mazimbu and Dakawa, which are located near the town of Morogoro in Tanzania, were the focus of this study.

An effort has been made by those who work with refugees to understand the impact of traumatic experiences during escape (e.g., Cernovsky, 1988) and/or torture (e.g., Ritterman, 1985) on the refugees adaptation to a host

country. In the present thesis, the focus is on Post-Traumatic Stress Disorder (PTSD) symptoms and their interplay with personality characteristics and social support. The following pages will describe how the refugees I studied in Mazimbu and Dakawa may differ from other survivors of traumatic life events.

Communal Life. Approximately two thousand people live in Mazimbu and Dakawa. Mazimbu has a school (from nursery school to high school) which accommodates almost half of this population. Most adults work in either a farm, clothing factory, or a hospital, all of which are part of this establishment. Dakawa is a newly established camp which is still under construction. Relative to Mazimbu, which was built mainly for educational purposes, Dakawa is a settlement where residents are mostly family units with pre-school-age children and are not necessarily employed. In both camps, all residents are members of the A.N.C., and they are fully supported by the movement. Life in Mazimbu and Dakawa is communal, whereby no one owns anything except for such personal belongings such as clothing. In Mazimbu older students live in dormitories while children live with their parents or, for those who have no biological parents, are given an adult or a family within the village with whom to live. Because of the abusive nature of the Apartheid system, it could be assumed (and I will later present evidence) that the majority of the Mazimbu and Dakawa

residents (including children) have at one stage in their lives been traumatized through torture in detention, during demonstrations in South Africa, and during South African military raids on neighbouring countries.

The Mazimbu and Dakawa refugees live as a community which shares similar cultural and political values. As such, their environment may tend to impose different kind of demands during their adaptation period from that of other refugees. For example, while Africans (Mpumlwana, 1985) and Vietnamese (Westermeyer, Neider, and Tau Fu Vang, 1984) in North America have to deal with the fact that they are a visible minority group as they adapt to their new societal norms, the Mazimbu and Dakawa refugees may have to learn to live a communal life.

Being a Refugee Amongst Many Refugees. Every member of these communities is a refugee, perhaps, with various kinds of traumatic experiences and in varying degrees. While many authors (e.g., Sales, Baun, & Shore, 1984; Silver & Wortman, 1980) have emphasized the importance of social support regarding a traumatic experience in facilitating post-trauma adjustment, the Mazimbu and Dakawa refugees may not routinely exercise this outlet (Pennebaker & Glaser, 1988) for several reasons. First, others may interpret one's open discussion of trauma symptoms as an indication of problems in coping with exile life. Such an interpretation may thwart any attempts of the persons in need of support,

causing them to withdraw to themselves. Second, others may think that the persons are egocentric and seeking sympathy by telling their stories, while those who have died in detention have no opportunity to tell their stories to anyone. Third, the persons' stories may be perceived by others as not dramatic or special enough to be worth telling, compared to those of other refugees. Fourth, the popular slogan for those who are politically active in exile (particulary South Africans) when comrades have died is that "We do not mourn! The struggle continues!" This slogan, on one hand, can be interpreted by some members of these groups as meaning that there is no time to reflect on past experiences or losses. Instead, one is expected to stand up with strength and work hard for the total liberation of the home country. On the other hand, the slogan can provide a good coping strategy for others because it may provide a purpose for living and setting of goals to be achieved.

The Special Problems of Being South African. South Africa, being the only country in the world with explicit racial and repressive laws, is undoubtedly producing a group of refugees who are particularlly distrustful of people from other races. As a result, South African refugees may have difficulties establishing relationships beyond a superficial level, thereby further limiting the quality of their social support network.

Effects of Trauma

The Effect of Repressive Methods Under the Apartheid System

Earlier in this paper the nature of the South African repressive laws and how they are enforced was reviewed. Given the repressive nature of the Apartheid system, there is no doubt that the lives of South Africans as a nation are seriously affected. According to Chikane (1986) South African social workers expressed a concern about the effects of children's exposure to and experience of violence in the townships. They noted that such exposure can never be conducive to the physical, mental, moral, spiritual and social development of children (Chikane in Burman & Reynolds, 1986).

The Effect of Torture as a Traumatic Event

Torture can be seen as a traumatic event which may result in the development of post-traumatic stress disorder (PTSD). In most cases it is used in such a way that the victim is left with few or no visible marks. For example, one South African young man whom I saw in therapy at the Psychological Service Centre at the University of Manitoba was tortured while in detention by being made to stand nude for several days while his penis was locked in a drawer of a table. As soon as he tried to move the table because of the pain, he was beaten severely on his back. He would try to bear the pain inflicted through beating as he feared losing his penis. Although this was physical torture, it was meant

to have a long-lasting psychological effect on this young man. Indeed, as he put it, "I became impotent for a while, I was scared to have relationships with girls. I began to convince myself that I was ugly anyway, even if I tried to approach them (girls) nobody would ever like me". Looking at this young man no one would ever know that he was tortured, yet his experience has left a scar in his mind. This method of torture is regarded as being efficient on several accounts. One reason, similar to the comment made by Genefke above, is that it destroys the individual's power (Ritterman, 1985).

Ritterman (1985) has identified the following as goals of torture: 1. destroying the personality, component by component; 2. humiliation of the victim; 3. producing resignation ; and 4. producing shame and guilt. How are these goals achieved? Values, beliefs, and principles one holds as well as one's self-concept are strong pillars of an individual's personality. An activist who values and believes in a non-racial democratic state for South Africa, for example, might dedicate his life to fighting for the cause no matter what it costs. Once detained, the torture and interrogation experiences will likely alter, at least temporarily, his values and beliefs (Ritterman, 1985). His self-esteem may be crushed and he may begin to negatively evaluate himself as well as his values and beliefs. Thus, he may experience psychological turmoil and feel the need to

protect his wounded inner self.

Humiliation, according to Ritterman (1985) is used mainly to destroy the victim's pride and dignity. For example, one South African victim who was interviewed by Foster and his coleagues shared his experience of humiliation during torture:

> . . . I was laid out on the table or laid on the floor and my testicles were then man-handled - a question would be directed at me, usually a question which I couldn't answer, like for instance, We know that you are a member of the ANC; and I would say 'no', because I'm not; and if my response was not the desired one then this would go on. . . (p. 133)

There is no doubt that this experience was not only painful and anxiety provoking, but also very humiliating to this victim.

One method of producing resignation is to make the victim feel vulnerable (Ritterman, 1985). This is accomplished by using techniques ranging from aversive suggestion techniques to activating a state of terror. According to the International Rehabilitation and Research Centre for Torture Victims (RCT) report in Copenhagen, cognitive and behavioral methods are utilized where in some cases in which the torturer pairs the memory of a long-term friend with a picture of the friend's mutilated face after

being tortured to death. They would do this by saying " You will never again remember your friend except as you see him now." For example, one of the victims interviewed by Foster et. al. (1987) related:

> . . . I was taken to another office where there was a picture of Steve Biko. Then I was asked if I know this guy, and I say, yes, that I know him. And they asked me where is he now, and I told them that he is dead. And they said that I will follow him if I don't speak the truth.. . . (p. 130)

Biko is one of the important people in the history of the South African political struggle. He was brutally killed while he was being tortured in prison. Therefore, by using a picture of a mutilated face of the people's hero would definitely have psychological impact. In other words, the message is " if we are able to defeat your strong hero, who are you to think that you can resist us ?"

Ritterman (1985) identified one of the main techniques used in producing shame and guilt as that of using illusion of choice, where victims are forced to choose between two distressing alternatives. For example, the tortured person may be told to choose between watching his wife being raped by several soldiers or signing a statement which will serve as evidence against his comrades. In other words he is made to believe that the well-being or survival of these people who mean so much to him will depend on his choice. Either

choice would leave him with a haunting sense of shame and guilt.

Post-Traumatic Stress Disorder

Clinical symptoms observed in victims of various traumatic events, such as rape and combat (e.g., Foy, Donahoe, Carroll, Gallers, & Reno, 1987; & Meyer, & Taylor, 1986; Solkoff, Gray, & Keill, 1986), are commonly referred to as post-traumatic stress disorder (PTSD). The Diagnostic and Statistical Manual of Mental Disorder - Revised (DSM-III-R) as published by (American Psychiatric Association (1987) outlines three categories of PTSD: a. acute - characterized by onset of symptoms within six months of the trauma and/duration of symptoms less than six months; b. chronic - duration of symptoms six months or more; and c. Delayed - onset of symptoms at least six months after the trauma. The characteristic symptoms of PTSD described by the DSM-III-R are " reexperiencing the traumatic event, numbing of responsiveness to or reduced involvement with the external world, and a variety of autonomic, dysphoric (abnormal feeling of anxiety, discontent, or physical discomfort) or cognitive symptoms"(p. 236). In addition, the DSM-III-R recognized depression and anxiety as associated features of the PTSD. Several theoretical models attempt to conceptualize the etiology of the PTSD. These include behavioral (Foa, Stekette & Rothbaum, 1989), biological (Van der Kolk, Boyd, Kystal, & Greenburg, 1984),

psychodynamic (Horowitz, 1986), and cognitive/information processing models (Chemtob, Roitblat, Hamada, Carlson, and Twentyman, 1988; Foa, Stekettee, and Olasov-Rothbaum ,1989).

Torture Syndrome as a Subtype of PTSD

A specific cluster of physical and psychological sequelae, referred to by some scholars (Allodi,et. al., 1985; Mpumlwana, 1988; Ritterman, 1985) as torture syndrome (TS) has been observed among the victims of torture (Allodi et. al, 1985; Foster et. al., 1987; Ritterman, 1985; Rudolph, 1984). Physical sequelae may be direct or indirect depending on the torture methods used. For example, brain damage due to head injury, or problems in walking due to falanga (severe beating under one's feet) are direct symptoms. Indirect symptoms include gastro-intestinal problems, resulting from poor living conditions , nutritional deficiencies, and physical exhaustion or lack of exercise while the victim was in detention. Psychological sequelae consist of both somatic symptoms and emotional problems. According to Allodi and Cogwill (in Allodi et. al.,1985) psychological symptoms include "severe anxiety, insomnia with nightmares about persecution, violence or other torture experiences, somatic symptoms of anxiety, phobias, suspiciousness, and fearfulness." (p.71)

The psychological component of TS would appear to be virtually identical to PTSD. The symptoms that characterize

PTSD have been observed among torture victims (Allodi, Randall, Lutz, Quiroga, Zunzunegui, Kolff, Deutsch, & Doan, 1985; Foster et. al., 1987). In fact, it has been noted that "recognizable stress and symptoms of anxiety and memory, and a tendency to reexperience the trauma in dreams and thoughts are components of both the torture syndrome and other stress and post-traumatic disorders" (Stover & Nightingale, 1985, p. 72).

Suggestions have been made by US researchers that the diagnosis of PTSD should be modified to distinguish torture-induced stress from other severe natural (e.g., earthquake) and human-induced stresses (e.g., rape). This could be done "by creating subcategories of the post-traumatic disorder according to etiology" (Stover & Nightingale, 1985, p. 72). Thus, PTSD can serve as an umbrella for all kinds of syndromes (such as TS) which develop as a result of traumatic events experienced by individuals.

Although the physical sequelae of TS can be as important as the psychological sequelae, I will focus on the latter for two reasons. First, people are more likely to readily seek professional help for physical ailments than they would for psychological or emotional problems, for fear of societal stigma associated with the latter. In addition, evidence (Allodi & Rojas, 1985; Foster et. al., 1987) points to the fact that victims often recover from physical

sequelae when treatment has been received (which is usually the case more for physical than psychological problems), while psychological problems tend to persist for a relatively longer period.

Empirical Findings on the Effects of Torture

In an attempt to understand the kind of traumas caused by torture, empirical investigations have focused on identification of torture methods frequently used and the consequences, as measured in terms of physical and psychological sequelae. One such study was conducted by Foster and his colleagues (1987) in South Africa among 158 ex-detainees. Because the authors were interested in the number of cases of detention, their statistical analysis was based on 176 cases in which twelve persons had reported multiple detentions. All but one of these cases reported to have experienced both physical and psychological methods of torture. In 168 cases health problems were reported while they were still in detention and/or immediately after they were released. The most frequently experienced health problems for these victims included sleeping difficulties (60%), headaches (53%), excessive amount of fantasizing (45%), weight loss (45%), appetite loss (44%), tiredness (36%) and problems with memory (34%). In addition to these symptoms, females experienced such gynecological problems as irregular periods (33%) and amenorrhea (13%). Foster et al. (1987) suggested that such problems could have resulted from

stressful experiences during detention. Further, Foster et al.'s study results suggest differences in symptoms on the reported health problems depending on gender, race, age, and regional areas. Results on sex factors indicate that females reported mostly excessive fantasy, crying, shivering, trembling and constipation. Memory problems were not as common in this group as they appeared to be with males.

Within the several different racial categories, Africans commonly experienced most of the health problems listed . These included weight loss (30%), headaches (34%), memory problems (24%), nightmares (29%) and shivering (18%). Foster et al. attribute the high frequency of these problems among this group to their findings that Africans received more severe physical torture than, for example, Caucasians. Further, it was suggested that both headaches and memory problems resulted from head injuries, while other psychological problems could be attributable to greater anxiety reported by the Africans. Depression, on the other hand was mostly experienced by the Caucasians (70%), while only 19% of Africans and 14% of Coloureds suffered from the symptoms. It was found that Caucasians experienced relatively milder physical torture with periods of solitary confinement.

Results on age showed a lower frequency of health problems reported by those below 20 than for those who fell

between 21 and 30 years of age. Foster et. al. suggested that this younger group, although severely persecuted, was perhaps detained for shorter time periods and less often subjected to psychological torture methods than older groups. Another possibility suggested by the authors is that young people are psychologically and physically hale.

Regionally, it was observed that victims from the Western Cape had least frequently reported 15 out of 21 of the listed problems. This region was less severe in the practise of torture when compared to other sampled regions. Where severe methods of physical torture were used, for example, in the Border region, the highest frequencies for serious health problems such as headaches, nightmares, tiredness, memory, and concentration difficulties were reported.

Respondents were then asked to recall the kind of health problems they experienced immediately after they had left the traumatic environment (prison), as well as their social and interpersonal problems. Sleeping difficulties, tiredness, and symptoms of depression were still frequently experienced by both Africans and Caucasians, 25% of participants reported symptoms in this category. Another study with similar findings was conducted by Randall, Lutz, Quiroga, Zunzunegui, Kolff, Deutsch, and Doan (1983) on a sample of torture survivors now living in the United States. In this study, the survivors of torture were asked to recall

the symptoms they suffered from immediately on release. The reported symptoms included difficulty in sleeping (62%), headaches (52%), weight loss (35%), decrease in concentration (59%), and tiredness (43%).

Allodi and Cogwill (1985) studied 41 political refugees who emigrated to Canada from Latin American countries. All these refugees claimed to have been subjected to political persecution and torture in their home countries. Out of these 41 people, nine were females and 32 were males. Two of the women had experienced maltreatment but were never detained. The rest of the respondents experienced incarcerations of various length. One man was imprisoned 11 times in five years. The frequencies with which the majority (31) was imprisoned varied from one to three times. The length of time spent in prison varied from seven days to one year, except for one man who served five years in prison. All respondents had experienced physical torture, and almost all were psychologically abused.

This study provides details on the torture methods used and on the effects of torture and on the victims immediately after the traumatic stage. With respect to the immediate psychological effects, severe nervousness and insomnia with recurrent nightmares were the most frequently reported symptoms by the majority (93%) of the respondents. For others (87%), symptoms experienced included anxiety, depression (71%), and unspecified deep-seated fears (51%).

Fifty percent of the respondents had noticed some behavioural and personal changes after torture, which included irritable outbursts, impulsive behavior, or social withdrawal. Ten percent of the victims had attempted suicide. Twenty-nine percent reported difficulty in remembering, while twelve percent experienced episodes of confusion and disorientation. It is important to note that such necessary support as medical attention was not extended to many (54%) of these victims.

The results of these three studies have demonstrated that torture victims do develop symptoms, at least at the acute stage (i.e., during and immediately after torture), which may indicate the presence of TS. A major limitation of these studies is the lack of data on incidence of chronic and/or delayed symptoms of TS. A study which has addressed this concern was carried out by a group of health professionals associated with Amnesty International USA (Allodi et. al., 1985). Forty-four participants came mostly from Los Angeles, San Francisco, and Seattle, where in the United States a majority of refugees from various countries were resettled. Out of these 44 subjects, 37 were males and seven were females and all but four were under 40 years of age. Most participants originally came from Chile (25), and Argentina (10). The majority (38) were torture victims. Most of these victims had experienced torture between 1973 and 1976, several years before this study was conducted.

However, four had been tortured only a year before they participated in the study.

Participants were asked to report on the extent and type of torture and on the duration and intensity of immediate and later symptoms they developed. Data on the victims' family medical history and personal health status, before and after torture experience, were also gathered. Each respondent was examined by a physician who, in addition to his/her examination results, further obtained consultation and laboratory tests where necessary. Also, a psychologist or a psychiatrist fluent in the participant's native language conducted a psychological examination which included an evaluation of mental status. Seven (16%) of the subjects refused psychological examination.

Results of the physical examination revealed that twenty percent of the victims, including those who had recently experienced torture, still had visible injuries, mostly from cigarette burns or electric shock torture. Seven women (16%) suffered from gynecological problems. Three-quarters of the victims who were subjected to "telefono " (violent boxing of the ears) were found to have hearing loss. Two-thirds of those who were suspended by their arms still suffered from upper back pain. On the whole, those who had been recently subjected to torture suffered from the greatest number of physical symptoms.

Psychological examination results indicated that 20% of

the respondents suffered from lower back pain whose physiological origins could not be traced. One other important observation was that while 55% percent of the victims reported to have suffered from headaches immediately after torture, the frequency of this complaint had decreased to 30% at the time of the study. While the physical problems noticeably decreased over time, psychological problems not only persisted but were reportedly causing great distress among the victims. One of the key symptoms reported by some (38%) of the participants was anxiety. Many reported experiencing nightmares about torture or the memories were easily triggered by ordinary stimuli. In all, 38% of the participants met the criteria for the diagnosis of PTSD.

Effects of Traumatic Experiences Such as Raids

The ongoing harassment by the South African state of its people even after they have taken refuge in neigbhoring countries has undoubtedly left scars on those who were victims of the military raids. One of the survivors of the Maseru massacre narrated how he felt shortly after the event had taken place as follows," I was in my underpants, cold and bleeding. When I reached the place, (another comrade's place) there was smoke and fire. I looked and saw two comrades burning. I was scared and the fire was so intense that I could not remove their bodies from the fire." (International Defence & Aid Fund [IDAF] 1985, p. 26) What

this survivor did not articulate was the psychological impact of this horrifying event. He probably felt numb and in a state of shock, and perhaps denying the reality of the event. The impact of raids experience was noted by IDAF (1985) as follows,

> The Maseru raid was a terrifying and traumatic event in a tiny country of 1.3 million people, playing host to 11,500 refugees from South Africa's apartheid system. The ferocity of the South African commandos, who surged through the sleeping streets of Maseru and shot down 40 people in their bedrooms and backyards, is indelibly imprinted on the memories of those who survived. (p.1)

Exile Syndrome

Monoz (1978) suggested that problems of exile are a form of bereavement where the loss of one's country is turned into a deep sadness which in some cases could be classified as reactive depression. Others (1990; Danieli, 1985; Fairbank, Caddell, Zimering, & Bender, 1985 Janoff-Bulman, 1985; Keane, Fairbank, Caddell, Zimering, & Bender, 1985) would associate this response pattern with the PTSD, and focused their investigations on specific PTSD symptoms such as nightmares (Cernovsky, 1990). Exile syndrome is often characterized by cluster of signs and/or symptoms which in its severe form may interfere with the

process of adaptation in exile. It is manifestation of pain experienced by refuges in exile due to dislocation and loss of roots. This pain often presents itself with a set of symptoms which include anxiety, depression, low self-esteem, vulnerability, anger/hostility, mistrust and feelings of insecurity, loneliness and ambivalence about forming new roots or remain being in transit (Colat, 1981; Monoz, 1978; Ritterman, 1985). Monoz draws an analogy between recovery of symptoms associated with bereavement and succession of clinical features which characterize a stage, such that recovery for the exiles means the gradual healing of the pain and numbness caused by the loss (rather than simple adaptation/assimilation to the new society).

Based on the broad definition of the PTSD reviewed above, it can be assumed that the history of traumatic experiences such as torture, injuries or witnessing others being killed during military raids and/or mass demonstrations is likely to interfere with adjustment. Also, mediating factors such as one's personality, social support and other current negatively experienced life events, are likely to play a role in the adaptation process to exile life.

The Adaptation to Trauma

Janoff-Bulman (1985) described three basic assumptions shared by most people which are seriously challenged or shattered by the experience of victimization: 1. the belief

in personal invulnerability; 2. the perception of the world as meaningful and comprehensible; and 3. the view of ourselves in a positive light. According to Janoff-Bulman, victimization calls into question each of these primary postulates of our world, which in turn destroys the stability with which we are ordinarily able to function. Consequently, victims' perceptions are now characterized by threat, danger, insecurity, and self-questioning.

Also, Janoff-Bulman (1985), as well as Perloff (1983) have noted that human beings operate on the basis of an illusion of invulnerability in their every day existence . That is, people see themselves as less likely than others to be victims of diseases, crimes, torture etc. (Perloff, 1983). This illusion of invulnerability serves as a buffer of stress and anxiety associated with the perceived threat of misfortune. The experience of victimization shatters the assumption of invulnerability (Janoff-Bulman, 1985). Consequently a victim feels a sense of "helplessness against overpowering forces . . . " (Wolfenstein, 1957, p. 159). This perception of vulnerability is often manifested in the victim's fear of reoccurence. That is, feelings of intense anxiety and helplessness accompany the victim's lost sense of safety and security. Janoff-Bulman has, in fact, observed that "In human-induced victimizations, such as criminal assaults, this is particulary distressing for the victim is no longer able to feel secure in the world of

other people " (Stover & Nightingale, 1985, p. 20). Human beings make the assumption of invulnerability on their basic belief that the world is meaningful. We know what to expect and why negative events occur. For political activists who express their views in a democratic state and end up being torture victims, such victimization does not make sense. It does not fit with the social laws in which one has believed about the operation of the world.

According to Janoff-Bulman (1985), most human beings share a basic assumption that they are worthy, decent people, they maintain an acceptably high level of self-esteem. Therefore, the trauma of victimization triggers a negative self-image in the victim (Horowitz, Wilmer, Marmar, & Krupnick, 1980). Subsequently victims perceive themselves as weak, helpless, needy, frightened, and out of control (Krupnick, 1980). This sense of helplessness ". . . can serve as a catalyst for revision of one's self-concept, leading to a loss of self-esteem" (Krupnick & Horowitz, 1980, p. 45). When humiliated and put to shame, victims of torture, for example, are likely to experience loss of self-esteem. Krupnick and Horowitz's (1980) loss of self-esteem concept, is similar to that of Ritterman's (1985) destruction of personality, which was described earlier in this paper. All these authors point to the extent to which victimization can negatively affect one's self-worth.

In keeping with Janoff-Bulman's theory, it follows that the basic assumptions are part of tacit knowledge in the individual's schemata. In terms of the cognitive model of self-knowledge organization (Guidano & Liotti, 1983), these assumptions are learned during an individual's early developmental stages and form part of one's belief system. A belief system is a term used to indicate the set of more or less coordinated abstract principles, specific beliefs, and problem-solving procedures that the individual has gradually developed (Guidano & Liotti, 1983). In addition to these basic assumptions, individuals carry with them their past experiences, personalities, cultural and personal values, and motivational patterns. When exposed to torture, a traumatic event, during the victimization stage the individuals enter a state of shock, become frightened, and cognitively disorganized. At this point, they are confronted with new information about themselves which is incongruent with their well established belief systems.

After the traumatic stage, availability of coping strategies become crucial. According to attachment theory (Guidano & Liotti, 1983), coping strategies selected for a particular situation can be adaptive or maladaptive, depending on how one's schemata are developed. Such factors as the victims' personality, past experience (e.g., previous torture or similar experience), social support, and perhaps crisis intervention can, for example, exacerbate or deter

the development of PTSD.

Coping Resources

Personality

Various personality factors have been described as important intervening variables in the coping processes (Wheaton, 1982). Evidence suggests that personal adaptive resources may moderate the effects of stress on mental health outcomes (Husaii, Neff, & Moore, 1982) Also, suggestions have been made (Kobas, Maddie, & Cowington, 1981) that the specific personality characteristics might be most useful in moderating the otherwise debilitating effects of stressful life events. These characteristics were conceptualized by Lazarus (1966) as those that encourage an optimistic cognitive appraisal and a decisive interaction with the events aimed at terminating their stressfulness. In this process the events can be re-appraised as not so threatening or terrible after all. It has been noted (Kobasa, 1979) that in order to arrive at a more complete explanation of the complexity of relationships of stress, personality, and health or illness, there is a need for a research focusing also on the physiological processes which underlie the stress response and on the relationship of these processes to personality.

Eysenck and Eysenck (1969; 1976) concluded that there are three major dimensions of personality that could affect one's coping mechanisms: a) extraversion-introversion; b)

neuroticism-stability; and c) psychoticism. Eysenck's hypothesis with respect to extraversion suggests that extraverts are subject to lower levels of general arousal than introverts (Eysenck, 1967). Introverts tend to have dysthymic disorders, are easily conditioned to fear, and have higher arousability and higher level of physiological activity than extroverts. Persons with high scores on neuroticism have lower tolerance of emotional stress than low scorers on the neuroticism dimension. The latter group tend to be less anxious except under conditions of persistent and/or extreme stress (Eysenck, & Rachman, 1965).

Social Support

Social support is one of the most crucial factors for coping. When faced with crisis, human beings seek out this support (directly or indirectly) to cope with their experience and rebuild shattered assumptions. There is general consensus (Bard, & Sangrey, 1979; Sales, Baun, & Shore, 1984; Silver, & Wortman, 1980) that social support following victimization helps the victims reestablish psychological well-being, particulary one's self-esteem. Given the critical importance of social support, it becomes important to examine how it operates in helping the victims cope.

The social support literature suggests that social activities are very crucial to health and mental health outcomes. Social support is perceived if the recipients

believe that their significant others are readily available in times of need, and that they are being cared for and valued by them (Heller, Swindle, & Dusenbury, 1986). Two components of social support have been described. The first component is an individual's esteem-enhancing re-appraisal of self which is derived from other's positive views of self (Gecas, 1982; Rosenberg, 1981; Shrauger, & Shoeneman, 1979; Thoits, 1985). The second component refers to stress-related interpersonal transactions in which members of one's social network assist in problem solving (Heller et. al., 1986). Thoits (1986, p.417) refers to this concept as "coping assistance, or the active participation of significant others in an individual's stress-management efforts".

In this concept, the effects of social support are defined as operating along two dimensions: (i) cognitive-emotional and (ii) instrumental aid. This description can be conceptually related to the theory of coping in general. The coping process is described by Lazarus, & Folkman (1984) as having both cognitive-emotional and behavioral components. From the clinician's standpoint, social support, therefore, as understood in terms of esteem-enhancing or empathic understanding coupled with instrumental help becomes an important precondition for effective coping (Heller et. al., 1986; Thoits, 1986).

It has been observed (Friedman, Bischoff, David, &

Person, 1982) that the more supporters victims had, the sooner they recovered from the post-traumatic stress of victimization. However, the biblical good Samaritans are not as readily available as they should be for the victims. It has been noted (Janoff-Bulman, 1985) that some of common excuses people use for withholding support are as follows: Bystanders tend to see victims as responsible for their fate and are thereby able to maintain their own beliefs in personal invulnerability. This kind of attitude is often displayed when the traumatic event is human-induced (such as torture and rape). For example, family members of an ex-detainee may choose to withdraw their support if they believe that the victim could have avoided getting detained by collaborating with the police or perhaps, because of fears of being seen as guilt by association and persecuted (Frederick, 1980). Another reason for withholding support suggested by Coates, Wortman, & Abbey (1979)is that many persons tend to show reluctance to associate with unhappy people.

Redefining the Event

Victimization challenges the victims' basic assumptions about the world. Therefore, in order to minimize this threat, individuals redefine the event in a manner that the possibility of maintaining the previous theories of reality can be maximized and the event is not evaluated as an instance of harsh victimization (Ritterman, 1985). This can

be accomplished by cognitively restructuring the negative events that have occurred (Taylor, Wood, & Lichtman, 1983). One strategy is comparing oneself to less fortunate others. For example, a female torture victim may experience great relief to find that she did not conceive during rape by her torturers nor did she catch any venereal diseases, since she knows one or two people who were not as lucky. Another strategy is to attach torture to a favorable attribute. This victim may feel better, for example, if she believes that her torture experience was the price she was prepared to pay for her deep commitment to her political belief, than if she attributes her misfortune to such uncontrollable forces as her personality or race (e.g. I am tortured because I am an African). Yet another approach to coping is to imagine fictitious worse worlds scenarios. The victim may imagine, for example, what would have happened to her children if she had been killed during the torture. Therefore she may be grateful that she is alive. A final example of a possible coping strategy is construing benefit from the experience. The woman may learn coping strategies (e.g., understanding the game of her torturers, such as psychological methods) or modify normative standards of adjustment, and would emerge from this victimization experience with strength and confidence.

Finding Meaning

Another coping strategy inherent in human beings is the

need to assign meaning to one's experience (Janoff-Bulman, 1985). From the perspective of attribution theory and the notion of cognitive appraisal, actual events are less important than the way individuals perceive those events and the meaning they attach to them. Being able to analyze and find meaning in the victimization has been found, for example, to facilitate adjustment among incest victims (Silver, Boom, & Stones, 1983). That is, if victimization is viewed as serving a purpose, the victim will be able to reestablish a belief in an orderly, comprehensible world (Janoff-Bulman, 1985). For example, in one study (Silver, Boom, & Stones, 1983) with incest victims, it was found that those women who were able to make sense of their experience were less psychologically distressed and better socially adjusted than those who were unable to make sense of the event. Also, the tortured political activist of the earlier example may regain strength in realizing that being tortured is part of being in the struggle for liberation. In other words, having made sense of the event, victims are able to integrate their experience into their cognitive models. Consequently they regain their self-esteem as they (perhaps) perceive themselves as heroes.

Possible Impact of Trauma When Coping Falters

Effective use of their coping skills or strategies allows the survivors of traumatic events to feel in control, determined to function adequately, and see themselves as

strong and capable. The adaptation to extreme stress is seldom smooth. Self-blame is commonly experienced by survivors, their coping strategies are ineffective, most fully deployed, or falter. Two types of self-blame were described (Allodi et. al., 1985; Janoff-Bulman, 1985): (i) behavioral self-blame, associated with adaptation; and (ii) characterological self-blame, associated with maladaptive outcomes.

The behavioral self-blamers believe that the traumatic event would not have occurred if it were not for their carelessness For example, an underground political activist would not have been caught if s/he had not recklessly chosen to appear in a public place and risk the danger of being arrested. This self-blame could be considered as adaptive in that the behaviors are considered modifiable through personal effort. The political activist may resolve "I shall be more selective next time about the places I go to and the people I interact with". In other words, the victim feels a sense of control over future misfortune and a sense of an increased personal responsibility. In contrast, the characterological self-blamers attribute their victimization to the kind of personality they have. In this case the self-blame tends to be chronic and maladaptive. It has been noted that when behavioral self-blame co-exists with characterological self-blame, it ceases to be adaptive (Janoff-Bulman, 1985).

Other similar factors have been described by Allodi et. al. (1985) as situational (more like behavioral self-blame); and pervasive, or existential guilt (similar to characterological self-blame). Guilt feelings of the survivors in situational guilt are viewed as being comparable to the circumstances victims believe led to their survival and to the deaths of others. Situational guilt is a common transient reaction, and is often detected during the first interview with torture victims (Allodi et. al., 1985). Based on his experience in treating Latin American survivors of political persecution, Allodi concluded (in Allodi et. al., 1985) that situational guilt has a good prognosis and is easily dissipated with psychotherapeutic discussions and reassurances during the early intervention.

In contrast, guilt feelings of an existential quality, reportedly common among the Holocaust survivors (Danieli, 1985), are unrelated to any of their acts of commission or omission. According to Allodi, no reassurance appears to dispel these kind of feelings. The existential guilt and characterological self-blame characterize a kind of cognitive schemata which may contribute to the development of PTSD. Beck (1985) found that such schemata were common with depressed persons.

Empirical Findings on Mediators to the Development of PTSD

Results of the investigations reviewed above suggest that trauma survivors either develop or still suffer PTSD

symptoms, particularly psychological sequelae, long after the immediate post-traumatic stage. Critical to the development of the chronic PTSD is the availability of adequate and effective coping skills. Most of the earlier studies have not provided data which examined the effect of mediating factors in reducing PTSD symptoms over time.

In one study, Allodi and Rojas (1985) examined the role of such mediating factors as personality, social network, and family support in the development of PTSD. Out of 1000 questionnaires distributed to Latin American refugees and immigrants who now live in the Metropolitan Toronto, 128 were returned and were used for the analysis. Among those who participated in the study were torture victims, refugees who experienced persecution but who were not tortured, and immigrants who did not have any of these traumatic experiences.

Allodi and Rojas (1985) found that the victims of torture as well as refugees from violent political persecution still experienced psychosomatic and mental symptoms which persisted over a period of ten years following the traumatic experiences. When various pre-trauma factors were examined (age, sex, education, marital status, occupation, participation and ranking in a social or political organization, and personality as measured by the dogmatism and authoritarianism versus flexibility and cognitive complexity scale), only

personality was found to correlate significantly with the reported psychiatric symptoms after torture experience.

Although this study has somehow recognized the important role of mediating factors, it did not clearly state how social network and family supports were measured. If these factors were measured at all, the results do not give a clear picture of what role they played in the maintenance of psychiatric symptoms torture victims and exiles suffered. Secondly, the study did not explain how personality, as a mediating factor affected the outcome (chronic PTSD). For example, it is not clear whether people with dogmatic and authoritarian personality did or did not report any of the symptoms and/or perhaps reported symptoms but with low or greater intensity when compared to people with greater flexibility and cognitive complexity.

The Present Study

An effort has been made by those who work with refugees to understand the effect of traumatic experiences (such as torture ; e.g. Ritterman, 1985) as refugees adapt to a country of asylum. Also, the use and effect of such repressive methods as torture, military raids, and brutal police actions during mass demonstrations have been documented (e.g., Allodi & Cogwill, 1985; Allodi & Rojas, 1985; Chikane, 1986; Foster et. al., 1987; IDAF, 1985). Evidence has been provided by these studies that most survivors tend to suffer from physical ailments and

psychological sequelae as a result of their traumatic experiences. There is a need now to understand how mediating factors such as personality, social support, and other life experiences affect the development of these psychological sequelae or facilitate healing and adjustment over time. Hopefully, identification of mediating factors will assist clinicians who work with traumatized exiles to develop or utilize more effective intervention strategies which will aim at targeting such mediating variables.

Hypotheses

1. Trauma and Adjustment. Traumatic experiences (torture, military raid, and demonstration crackdown experiences) exacerbate the psychological maladjustment of the South Africans. This maladjustment would be evident in terms of trauma-symptomatology (e.g., intrusive thoughts and thought avoidance), as well as more general distress symptoms as measured by the Symptom Check List-90 Revised.

(a) Torture Experiences. Exiles who were tortured show more signs of maladjustment than those who were not tortured. For those tortured, the severity of maladjustment would be related to severity of torture experienced.

(b) Military Raids Experiences. Exiles who experienced military raids show more signs of maladjustment than those who did not experience military raids.

(c) Demonstration Experiences. Exiles who experienced police crackdowns during demonstrations show more signs of

maladjustment than those who did not have these negative experiences.

2. Mediators of the Trauma-Adjustment Relationship. In addition to the severity of trauma experienced, other variables mediate psychological adjustment including availability of social support, personality variables, and other negative events.

(a) Personality. Increased neuroticism would mediate increased psychological maladjustment.

(b) Social Support. Increased social support would mediate decreased psychological maladjustment.

(c) Negative Life Events. The experience of additional negative life events tend to be associated with maladjustment.

METHOD

Subjects

Subjects were drawn from a population of about two thousand South Africans who lived in the African National Congress communities of Mazimbu and Dakawa near Morogoro, Tanzania. These two residential settings are about an hour's drive from each other. Voluntary participation in the study was encouraged through the help of the administrators of both villages and the principal of the secondary school. They invited potential participants through weekly newsletters, notice boards, and verbally during weekly gatherings of various subgroups (e.g. youth committee, women's section, etc.). A note was distributed at these functions which was used to introduce the researcher as a member of the A.N.C. who was in graduate school in Canada and who had been granted permission by the A.N.C. headquarters to conduct the study. In addition, the purpose of the study was described as being beneficial to the residents in that the results would hopefully assist the Mazimbu and Dakawa health workers to better understand some of the psychological difficulties with which the residents were struggling. Because the A.N.C. is a liberation movement and security conscious, I agree not to attach to this thesis the text of the notice that was used to recruit participants.

Two hundred and ten people volunteered to participate,

five of whom returned the questionnaires uncompleted. Out of 205 subjects who completed a battery of questionnaires, six used the translated versions (three used isiXhosa, two isiZulu, and one isiSotho) and the remainder used English version. One hundred and forty eight of the subjects (72%) were males and 57 (28%) were females; the majority (118) were students. Ages ranged from 13 to 47 years of age, with a mean of 25; the majority (84%) clustered between 16 and 30 years of age. The length of time participants had been in exile varied from few weeks to 24 years with the majority (118) of the people having spent two to four years in exile.

Procedure

Data were collected in three sessions. In Mazimbu the first session was mainly for adults and the second session was for students. The Mazimbu groups were assembled in two different places, so it was possible to begin the second session before the first session was over. Early in the day of the set date for data collection (which was decided by the Mazimbu camp administrator), students were reminded by their school principal to assemble that evening at seven thirty in the school hall. Also, the community members were reminded early that day by various committee leaders (e.g., the youth leader), to be in their community hall by seven o'clock that evening. The third session for the Dakawa residents was run two weeks later. Similar to Mazimbu, in

Dakawa people were encouraged by the camp administrator to assemble in their community hall and to participate in the study. While each session was scheduled for two hours, it took approximately one-and-a-half hours for most people to complete the questionnaires. There were three people (other than the researcher) who assisted those who needed clarification about the procedure. During the session breaks were avoided for fear of attrition.

After the Mazimbu data collection was completed I was informed by one of the assistants that there was a belief expressed by some of the students that this study was a threat to the security of the Mazimbu administration. Apparently, about forty-five minutes after the student session had begun, two students who intended to sabotage the research project began to pass a verbal message among other students. This message was that I was an "American researcher" who was most likely connected with the CIA which might maliciously use this information against the Mazimbu residents. I believe that there was a degree of under-reporting of traumatic experiences and other life events among the students who responded to the message.

Instruments

The battery of questionnaires used in this study was intended to tap information about (i) trauma (i.e. torture, raid, and mass demonstration) experiences; (ii) personality, social support, and life events, hypothesized to have a

mediating effect in the healing process of those who had been traumatized; (iii) the health status within the six months following release from detention for those who had been detained, and (iv) symptoms of psychological maladjustment generally and PTSD more specifically.

Trauma Assessment

Torture Experiences. The experience of torture can be described in terms of physical and psychological stressors (e.g. Allodi & Rogas, 1985; Foster et al., 1987). With this in mind two separate lists of items were composed, one which would tap physical torture experiences (PHYSTORT; see Appendix A) and another to tap psychological torture experience (PSYTORT; see Appendix A). These items were adopted from the methods of torture reported by the South African ex-detainees in the Foster, Davis, & Sandler (1987) survey. At the end of the listed items, spaces were provided for people to list any other methods to which they were exposed that were not included in the scales.

Raids Experiences (RAIDSEXP). Several questions (see Appendix A) determined experiences related to military raids. The participants were asked to indicate whether they had directly or indirectly experienced the impact of raids. An example of direct experience would be, "Did you get physically injured in the raid(s)?". A typical question for indirect experience, for example, would be "Did any of your family members get killed or severely injured in the

raid(s)?". The rationale for selecting these items was that even the indirect experience could have psychological impact on people (Mpumlwana, 1985).

Demonstration Experiences (DEMOEXP). My indirect experience with South African demonstrations assisted me to design a few items which aimed at tapping these experiences #(see Appendix A - Items 95, 98, & 99). These items again included direct and indirect involvement.

Maladjustment Assessment

Post-Detention Health (POSTHEALTH). A list of health problems which were reported during detention by the South African ex-detainees in Foster et al. (1987) study was adopted (see Appendix A). It was used to measure health problems experienced within the first six months of the subjects' release from detention. In addition, people were asked to list other health problems they might have suffered during that time.

Symptom Check List-90 Revised (SCL-90-R). The SCL-90-R is a multidimensional symptom self-report inventory developed by Derogatis (Derogatis & Cleary, 1977; see Appendix C). It is comprised of 90 items, each measured on a 5-point scale of distress from "not at all" (0) to "extremely" (4). Current psychopathology is reflected in terms of nine primary symptom dimensions. The primary symptom construct are Somatization (SOM), Obsessive-Compulsive (O-C), Interpersonal Sensitivity (INT),

Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic-Anxiety (PHOB), Paranoid Ideation (PAR) and Psychoticism (PSY). Another group of items of the SCL-90-R have been identified (Derogatis & Cleary, 1977) to form an Additional Scale. The items of this scale include, for example, poor appetite, trouble falling asleep, feelings of guilt, etc. Internal consistency reliability estimates on these primary symptom scale are satisfactory (Cronbach alpha range from .77 to .90). In an extensive clinical study with over 100 outpatients using the SCL-90-R scales, Derogatis and Cleary (1977) provide extensive data for the construct validity of the SCL-90-R scales. Using factor analytic techniques they demonstrated very good empirical validity for the rational-theoretic derived scales, with the exception of the psychoticism scale for which it was moderate.

The SCL-90-R also provides three global indices of pathology: the Global Severity Index (GSI), the Positive Symptom Distress Index (PSDI), the Positive Symptom Total (PST). The GSI combines information on numbers of symptoms and intensity of distress. The PSDI is a pure intensity measure, while the PST communicates data on the number of symptoms only.

The SCL-90-R was selected as a measure of psychological distress and pathology for several reasons: (a) its nine subscales appear to be measuring a wide range of psychopathology; (b) some of the items found in the

Additional scale (e.g., "poor appetite", "restlessness", and "feeling guilty") are symptomatology often reported by people with torture experience; and (c) the SCL-90-R has been used cross-culturally (e.g., Mpumlwana, 1985; Westermeyer, Neidei, & Tou Fu Vang, 1984). Since the initial design of the study and selection of instruments, Saunders, Mandoki, and Kilpatrick (In press) have developed a 28-item scale from SCL-90-R items which they referred to as Crime-Related Post-Traumatic Disorder scale (CR-PTSD). Having administered this 28-item scale to a community sample of 355 adult women, these authors were able to discriminate between CR-PTSD positive and negative respondents. The CR-PTSD scale was examined for measuring PTSD symptoms in this study.

Impact of Event Scale (IES). The 15-item IES was developed by Horowitz, Wilner, and Alvarez (1979) to assess the experience of post-traumatic stress for any specific life event and its context, such as death of a loved one (see Appendix C). It measures two categories of experience in response to stressful events: intrusive experience, such as ideas, feelings, or bad dreams; and avoidance, the recognized avoidance of certain ideas, feelings, and situations.

Norms of the IES are based on data gathered from two samples. One was a sample of 35 outpatients who needed professional help to cope with death of a parent. The

second was a field sample of 37 adult volunteers who had a recently deceased parent. The average age of the outpatient sample was 31.4 with a standard deviation of 8.7 years. The mean score and standard deviation on the intrusive subscale was 21.02 and 7.9, respectively. The avoidance subscale mean was 9.4 with a standard deviation of 9.6. Participants were assessed two months after they had experienced the traumatic event. The IES showed very good internal consistency with coefficients ranging from 0.79 to 0.92, with an average of 0.86 for the intrusive subscale and 0.90 for the avoidance subscale. No data on temporal stability were reported. These normative samples, however, were patients who had experienced a "normal" event in the death of a parent. PTSD involves trauma beyond the normal range of human experience, for example, torture.

Mediator Assessment

Eysenck Personality Questionnaire Revised (EPQ-R). The EPQ-R is Eysenck, Eysenck and Barnett's (1985) new version of the Eysenck Personality Questionnaire (EPQ; Eysenck and Eysenck, 1975). It was developed with the purpose of improving what have been identified as psychometric weaknesses in the Psychoticism scale of the EPQ. The first weakness these authors pointed out related to the low reliability of the P scale, with internal reliabilities ranging from 0.74 for males to 0.68 for females. The second problem was the low average scoring, with means of 3.78 for

males and 2.63 for females. Also, the standard deviations were about the same as the means for both males and females (3.09 and 2.36 respectively). This defined the third problem, which according to the authors indicated the grossly skewed distribution of scores. They described the distribution as similar to that of a Poissonian rather than normal distribution. The reconstruction of the P scale resulted to an EPQ-R with 100 items (see Appendix B).

Like the EPQ, the EPQ-R has four scales which measure Eysencks' three dimensions of personality; Extroversion (E), Neuroticism (N) and Psychoticism (P) as well as dissimulation (Lie Scale, L). Eysenck's (1967) hypothesis is that people with extroverted personalities have less excitable central nervous systems than introverts. As such they are less likely to experience uncomfortable high levels of arousal when compared to introverts. Eysenck and Eysenck (1963b) defined Neuroticism as an emotional over-responsiveness, similar to the description of anxiety given by Taylor (1953) for the Manifest Anxiety Scale. Kendrick (1981) further speculated that the personality dimension of Neuroticism is a largely inherited lability of the autonomic nervous system. Psychoticism is defined as a general factor which predisposes persons to psychosis in varying degrees and is inherited as a polygenic character. According to Eysenck and Eysenck (1976) people are likely to dissimulate under certain circumstances (especially when subjected to a

selection procedure). The Lie Scale not only measures dissimulation but also corrects other scales for test-taking attitudes. The EPQ-R was selected for this study because its old version, the EPQ, has been validated in various cross-cultural studies (Eysenck, Adelaja, & Eysenck, 1977, Jegede, 1981; Mpumlwana, 1985) and found to be reliable with alpha coefficients ranging between 0.80 to 0.90.

Provision of Social Relations (PSR). The PSR is a 15-item self-report measure designed to assess components of social support (see Appendix B). It was developed by Turner, Frankel, and Levin (1983), based upon Weiss's (1974) five components of social support (attachment, social integration, reassurance of worth, reliable alliance, and guidance). Factor analysis yielded two dimensions of PSR: family support with six items, and friend support with nine items. The PSR was developed in a number of studies in Canada involving 200 university students, 523 discharged psychiatric patients (59% female), and 989 (54% female) psychiatrically disabled community residents of 11,000 households interviewed in Ontario. Tests of the internal consistency of the family support and friend support factors and on the 15-item summary measure indicated satisfactory reliabilities with alpha coefficients ranging from .75 to .87.

Life Event Scale (LES). The LES (see Appendix B) was developed by Sarason and Johnson (in Sarason, Johnson, &

Siegel, 1976). This is a 57-item self-report measure that allows respondents to indicate potentially stressful events that they may have experienced during the past year. The scale has two sections. Section I contains 47 specific events felt to be common to individuals in a wide variety of situations. These events were partially derived from the Social Readjustment Rating Scale (SRRS: Holmes & Rahe, 1967), hence 34 of its items overlap with those of the SRRS. Section I also includes three blank spaces in which subjects can indicate other events that they may have experienced. Section II has 10 events which are designed primarily for use with students.

Each item is rated on a 7-point scale from very positive (+3) to very negative (-3) according to the impact of the event on the person's life. The LES yields three scores: positive change (PCS), negative change (NCS), and total change (TCS) scores. The LES showed good validity when used in various studies, especially for those events considered undesirable (reliabilities for the negative change scores were .56 and .88). In other fairly recent studies (Flannery, 1985; Mendola, Fisher, Silver, Chinsky, and Goff, 1990) in which the LES was employed to measure the impact of negative life events, reliability coefficients similar to those of Sarason et. al.'s (1978) normative sample were found.

The LES was modified so that such items as "Foreclosure

on mortgage or loan", which are culture-bound and inappropriate for the current sample, were excluded. This modified version of the LES was used with an African population in Canada (Mpumlwana, 1985). The reported reliability coefficients ranged from .42 to .61, and were similar to those reported by Sarason & Siegel (1978). For this study, the only LES measure used was the NCS. The rationale for this was based on the assumption that the negatively rated events would likely have a negative impact on the adaptation process of the exiles.

RESULTS

Psychometric Properties of Instruments

Most of the psychometric properties of the scales used have been based on normative samples (North Americans and English) quite different from the population from which the sample of this study was drawn. Also, some of the scales were new, unvalidated scales created for this study to tap constructs for which no clearly appropriate existent measures could be identified. To insure that these scales were measuring what they were intended to measure, the following steps were taken:

1. Internal consistency analyses were calculated for the trauma information checklists (PHYSTORT, PSYTORT, POSTHEALTH, RAIDSEXP, and DEMOEXP) that were assumed to unidimensional.
2. An exploratory factor analysis was conducted for the Existential Survey, since the scale was believed to be multidimentional; however, there were no clear expectations of its structure in this sample.
3. Confirmatory factor analyses were conducted for the EPQ-R, PSR, IES, and the SCL-90-R.

Trauma Assessment

Torture Experiences (PHYSTORT and PSYTORT). The groups of items which were intented to tap torture experience formed two reliable scales, PSYSTORT (9 items) and PSYTORT (12 items). Created by totalling the number of different

torture methods experienced, PHYSTORT had a Cronbach alpha of 0.76 and PSYTORT had a Cronbach alpha of 0.69. These reliabilites were deemed acceptable.

Raids Experiences (RAIDSEXP). Internal consistency analysis for the nine items which measured raids experiences resulted in the formation of a reliable scale RAIDSEXP with a Cronbach alpha of 0.83.

Demonstration Experiences (DEMOEXP). The three items which measured DEMOEXP were entered into internal consistency analysis, and did not form a reliable scale. As a result, the items were individually entered into the analyses.

Symptom Assessment

Post-Detention Health (POSTHEALTH). The group of items which measured health problems which were experienced by the ex-detainees within six months of their release from detention formed a reliable scale of POSTHEALTH, with a Cronbach alpha of 0.83.

Symptom Checklist-90 Revised (SCL-90-R). Because of the few number of subjects, the ten scales of the SCL-90-R, rather than the 90 items, were subjected to a factor analysis. This resulted in only one factor with an Eigenvalue greater than 1 (7.05). The factor loading of every scale was .82. It seemed, therefore, that all the separate SCL-90-R scales were measuring a common factor,

essentially the GSI which was created by totalling all the scales. The Cronbach alpha for the GSI was very high, 0.94.

The 28-item CR-PTSD scale was analyzed for reliability and it was found to be highly reliable (Cronbach alpha = 0.91). The extent to which the CR-PTSD scale was measuring anything distinct to PTSD is dubious, however, given its 0.97 correlation with the GSI.

Impact of Event Scale (IES). The two scales of the IES were analyzed for reliability. Cronbach alphas for Intrusive Thoughts and Avoidance scales were 0.75 and 0.53 respectively. While the reliability of the Avoidance scale was of some concern, combinations of factor and reliability analyses failed to reveal a significantly superior scoring of the IES so the original scoring approach was retained.

Mediator Assessment

Eysenck Personality Questionnaire Revised (EPQ-R). As the main validation work on the four factor (Neuroticism, Extraversion, Psychoticism, and Lie scales) structure of the EPQ-R has been conducted on British samples (Eysenck et al., 1986), it was felt desirable to confirm this factor structure's appropriateness for this South African sample. An immediate problem was that the 205 subjects' data obtained from Mazimbu and Dakawa were likely not a sifficient sample to factor analyze a 100-item instrument. The issue of satisfactory sample sizes for a given number of variables is less well-devleoped for the newer confirmatory

factory analysis techniques than for the more traditional exploratory factor analysis. Although there are some Monte Carlo studies relevant to confirmatory factor analysis (Anderson & Gerbing, 1984, Boomsma, 1982, 1985; Gerbing & Anderson, 1985, 1987), none of these have involved large enough numbers of variables to bear upon the problem at hand. We are left then with what Bentler (1985) calls an "over-simplified: guideline that the ratio of sample size to the number of free variables have a minimum of 5.1. By this rough guideline, attempting to confirm the factor structure of the 100-item EPQ-R on the 205 Mazimbu and Dakawa subjects seemed precarious. The approach advocated by Cattell (1978) for addressing this type of probem was employed, which involved additively combining items into what he called parcels. While recommended combining items into parcels based on empirical cirteria of their interelatedness, Schallow and Mpumlwana (Unpublished Manuscript) argue that forming parcels based upon researcher's judgement of the conceptual homogeneity of the meanings of items is more consonant overall with the spirit of confirmatory factor analysis.

Indeed, Schallow and Mpumlwana (Unpublished Manuscript) compared three different procedures (conceptual, empirical, and random) for combining items within subscales into parcels. For any of the pracelling approaches, the number of parcels to subjects is now within the minimal guidelines

suggested by Bentler for a confirmatory factor analysis. The scale means and standard deviations (whether based on items or parcels) and the mean intercorrelations and Cronbach alphas of scales by all approaches are shown in Appendix D(a). These parcels appear to quite adequately capture the reliable variance of the scales they represent.

The conceptual, empirical, and random parcels were each subjected to a confirmatory factor analysis in which each parcel was free and allowed to be estimated on the respective EPQ-R scale that it was supposed to measure and set to zero on all other factors; all factors were allowed to intercorrlate and thos intercorelations were estimated so the solutions were oblique rather than orthogonal. The analyses were performed using LSREL VI (Joreskog & Sorbom, 1986). The results of these analyses are summarized in Appendix D (b). As can be seen in Appendix D (b), all three parcelling methods resulted in highly similar solutions and all were deemed to be indicative of an acceptable fit of the data to the model. What is evident, however, is the sometimes quite substantial intercorrelations of the "pure" factors and the weak loadings of many of the parcels, however formed, intended to be measuring Psychoticism on the P scale. While in an overall sense the scoring of the EPQ-R items in the manner suggested by Eysenck and Eysenck (1987) seems justified with this sample, these analyses would suggest some considerable caution in interpreting any

results involving the Psychoticism scale.

While the reliability coefficients for the EPQE (0.72), the EPQN (0.80), and the EPQL (.72) were acceptable, that of the EPQP (0.53) was marginal.

Provision of Social Relations (PSR). The suggested scaling of the PSR into two scales, one measuring perceived social support of family and the other of friends, was subjected to a confirmatory factor analysis. Using LISREL VI (Joreskog & Sorbom, 1984) items were allowed to be free to assume nonzero values on the scales which they were intended to measure and given zero loadings on the other scales, with the two scales themselves allowed to be intercorrelated (non-orthogonal solution). This seemed to provide a satisfactory fit to the data (Goodness of Fit Index = 0.92, Adjusted Goodness of Fit Index = 0.89). Reliability analyses for the two scales, PSRFREND (Cronbach alpha = 0.66) and PSRFAM (Cronbach alpha = 0.77), seemed acceptable.

Life Event Scale (LES). The Negative Change Score (NSC) of the LES was found to be reliable with the Cronbach alpha of 0.75.

General Findings

Trauma Experiences

Torture. Of the 205 participants, 68 people (33%) reported that they had been detained in South African prisons. Thirty-six (53%) of those reported that they were

detained once and thrity-two (47%) were detained more than once. Detention times varied from one to 12 months (M = 3 months). All ex-detainees reported that they had been interrogated and tortured. Almost all of those tortured (91%) had been physically and psychologically tortured. Five people received psychological torture only and two reported only physical torture. The number of interrogation/torture sessions for each survivor varied between one to twelve (M = 6). Fifty-nine (87%) of the survivors had more than one torturer per session.

Listed in Table 1 and 2 are physical and psychological torture methods reported by the Mazimbu/Dakawa residents who had been detained and, for comparison, by the respondents who were of African racial group in the Foster et al. (1987) survey of South African ex-detainees. As can be seen, the torture experiences reported by the two samples are very similar. The most notable differences reported were for the psychological torture methods, where the current smaple reported less solitary confinement and being offered rewards but more constant interrogation and sleep deprivation than the Foster et. al. sample. For those tortured, the mean number of physical torture experiences reported was 3.04 (SD = 3.04) and the mean number of psychological torture experiences reported was 4.15 (SD = 4.15).

Raids Experiences. Out of the 205 participants, 39 people were directly and/or indirectly affected by raids.

Eleven (28%) of those who had direct raids experience were physically injured. Another 24 (62%) narrowly escaped being killed. Thirty-three (85%) respondents reported that their close friends were injured or killed. Also, 13 (33%) people reported that one or more of their family members were severely injured or killed in the raids, while 20 (51%) participants witnessed the killing of their loved ones. Nineteen (49%) people reported that they had witnessed the killing of the victims who were neither their close friends nor relatives. Of those experiencing raids, the mean number of these raids experiences reported was 3.08.

Demonstration Experiences. Out of the total sample, eighteen people (9%) reported to have been injured during demonstrations. Fourty-four (22%) reported that their relatives or friends were injured or killed during demonsrations, while 64 (32%) witnessed the killing of people other than their relatives or friends.

Maladjustment

Post-Detention Health. Table 4 reports health problems ex-detainees suffered within the first six months after release from detention, and are compared with the health problems Foster et. al.'s sample (Africans only) reported during detention. Other health problems not listed in the table included nervousness, hearing loss, dizziness, broken teeth, fractured leg, eye problems, and internal bleeding.

Table 1

Percentages of Ex-Detainees Reporting Different Physical Torture Methods

Method	Present study	Foster study
Beatings	74	86
Forced standing	56	58
Maintain abnormal position	35	38
Forced gym exercises	34	34
Electric shock	29	32
Food deprivation	28	24
Bag over head	22	30
Strangulation	18	23
Induced pain through needles and hair pull	10	5
Torture in genitals including rape	7	3
Suspension in various forms	4	-
Heavy weight put on chest or throat	4	-

Table 2

Percentages of Ex-Detainees Reporting Different Psychological Torture Methods

Method	Present	Foster et.al._
Good/bad interrogators	65	56
False accusation	60	84
Threatened violence	57	63
Verbal abuse	56	71
Misleading information	53	48
Solitary confinement	49	84
Witness/knowledge of other's torture	44	56
Threats of execution-self/family	43	48
Constant interrogation	41	21
Forced undress	34	30
Sleep deprivation	27	14
Blindfolded	22	19
Offered rewards	16	39
Harrassment	13	-

Most of these health problems reported seem to have been equally experienced in both studies. However, as shown in Table 3, a smaller percentage reported depression, and restlessness in the Foster et. al. study than in the present study. Fewer people in the present study reported shivering, excessive fantasy, crying, nightmares, and headaches than in the Foster et. al. study. The mean number of symptoms being reported is 6.00 (SD = 9.20).

Symptom Checklist-90 Revised (SCL-90-R). The means and the standard deviations of the the SCL-90-R for the present study have been compared with those of the Hmong refugees reported in Westermeyer et.al. (1984), the African student sample in Canada of Mpumlwana's (1985) study, and the General Outpatients (OPD) normative sample of Derogatis et.al. (1973) (see Table 4). A significant difference was found, where the mean of the GSI in the present study was much higher than that of the Hmong refugees ($t = 4.13$, $p < .001$) and still significantly less than ($t = -2.79$, $p < .01$) but approaching that of psychiatric outpatients in Derogatis et al. (1974) normative sample. The Mazimbu/Dakawa residents were higher than the Hmongs on every subscale except Depression and were nonsignificantly different than the outpatients on all scales except Depression, Anxiety, and
Anger/Hostility.

Impact of Event Scale (IES). Subjects were asked to

Table 3

Percentages of Ex-Detainees Reporting Health Problems: Post-Detention for Mazimbu/Dakawa Sample and During Detention for Foster et. al. Sample.

Health problem	Mazimbu/Dakawa	Foster et.al.sample
Difficulty sleeping	54	61
Depressed	50	19
Weight loss	50	51
Difficulty concentration	50	46
Restlessness	49	31
Headaches	49	57
Difficulty memory	46	40
Appetite loss	46	48
Tiredness	44	40
Nightmares	40	49
Stomach pains	27	31
Constipation	25	25
Shivering	25	31
Excessive fantasy	22	44
Crying	21	26
Nausea	19	21
Sweating	18	19
Other health problems	24	*

select an event which has been the most traumatic for them to rate their responses to on the individual IES items. Ninety one people (44% of the total sample) responded to the IES scale. Thirty one (34% of IES respondents) selected torture as the most traumatic event. Nineteen (21% of the respondents) selected the killing and injury of their friends and family members through various means (e.g., torture and during demonstrations). Twelve respondents (13%) reported the demonstration events during which they had sustained injuries. Thirteen (14%) were grieving for their family members who were killed or severely injured during the raids. Thirteen other respondents (14%) reported a variety of other events which occurred in and outside South Africa. These included people being forced to leave their homes for barren land in other parts of the country by the South African gorvenment, friends facing death sentences in South African prisons, parents dying of natural causes, and going into exile.

Mediators

Eysenck Adult Personality Questionnaire Revised (EPQ-R). A student t-test was used to compare means and standard deviations (see Table 5) of the Neuroticism, Lie, and Psychoticism scales between the present sample, the sample of African students in Canada (Mpumlwana, 1985), and the British normative sample (Eysenck, 1979). The results of this comparison revealed that the South African refugees

Table 4

Means (SD) of the SCL-90-R scales and GSI for Mazimbu/Dakawa Residents, Hmong Refugees, and Psychiatric Outpatients(OPD)

SCL-90-R Scales	Maz/Dakawa(1) Residents	Hmong(2) Refugees	1 vs 2 ts	OPD(3) Sample	1 vs 3 ts
Somatization	1.03(.75)	0.55(.52)	6.50	1.05(0.97)	n.s.
Obsessive-Compulsive	1.50(.83)	1.19(.77)	3.22	1.51(1.01)	n.s.
Interpersonal Sensitivity	1.26(.78)	0.87(.61)	4.77	1.40(0.96)	1.46
Depression	1.12(.80)	1.17(.63)	n.s	1.84(1.05)	6.86
Anxiety	1.05(.76)	0.56(.44)	7.11	1.51(1.00)	4.06
Anger -Hostility	1.02(.83)	0.48(.49)	7.11	1.29(1.05)	2.25
Phobic Anxiety	1.02(.83)	0.55(.58)	2.10	0.88(0.97)	n.s.
Paranoid Ideation	1.19(.80)	0.83(.68)	4.09	1.34(1.08)	n.s.
Psychoticism	0.99(.71)	0.77(.58)	2.88	0.99(0.84)	n.s.
Additional Scale	1.17(.77)	----	----		
GSI	1.11(.65)	0.80(.48)	4.13	1.35(0.82)	-2.79

GSI for African students in Canada = 0.68(.51) ; N = 109

were significantly higher on Neuroticism ($t = 7.18$, $p < .001$) than the African students in Canada and the British ($t = 8.43$, $p < .001$) sample. The African students and the British sample did not differ on Neuroticism. Also, while the Lie scale mean score of the South African refugees was significantly higher ($t = 14.99$, $p < .001$) than that of the British sample, it was significantly ($t = 10.85$, $p < .001$) lower than that of the African student sample in Canada. Furthermore, the South African refugees were significantly lower on Psychoticism than the African students ($t = 7.05$, $p < .001$) but higher than the British ($t = 10.85$, $p < .001$).

Social Support. During the first six months after they were released from detention, 26 (47%) ex-detainees reported that they were not satisfied with the social support they had received from their family and friends, while 36 (53%) were satisfied. Also, within the first six months of their release 42 (62%) people needed medical attention, some (59%) of which were not satisfied with the treatment they had received. Further, 15 (22%) ex-detainees received psychiatric/psychological treatment, and seven (10%) were helped by traditional healers.

The mean PSR scale scores for perceptions of family support were 10.44 ($SD = 4.69$) and for perceptions of support from friends were 19.47 ($SD = 5.88$).

Table 5.

The Means (SD) for the EPQ-R Neuroticism, Lie, and Psychoticism Subscales of the Present Study Compared to Other Groups.

EPQ-R Scales	Present study N = 205	African students N = 109	British sample N = 404
Neuroticism	13.31(4.62)	9.75(3.93)	9.83(5.18)
Lie	11.91(3.89)	13.97(3.54)	6.80(4.14)
Psychoticism	5.32(2.53)	8.63(2.88)	3.78(3.09)

Life Events Scale (LES). The most negatively rated

life event, which was endoresed by 53 persons, was "major personal illness or injury". This was followed by "major change in social activities (e.g. parties)", which was negatively rated by 33 people. The "major change in sleeping habits" negatively affected 29 people, while 25 people reported "change of residence" as having had negative impact on their lives. "Death of a close family member", "major change in eating habits (much more or much less)", and "major change in closeness of family members" negatively affected 23 people. Others negatively rated "serious illness or injury of a close family member" and "sexual difficulties" (21 people), "breaking up with boyfriend or girlfriend" (18 people), "serious illness or injury of a close friend" (16 people), "major change in church activities (decreased or increased), and "major change in usual and/or amount of recreation (14 people). Other negatively rated events included "detention in jail" (12 people), "pregnancy" as rated by either the spouse/boyfriend (4 people) or by the woman herself (2 people), and "change in work situation" (4 people). The mean Negative Change Score was -4.87 (SD = 6.32).

Hypotheses Testing

Hypothesis 1: Trauma-Adjustment Relationships

It was hypothesized that traumatic experiences of torture, demonstration crackdowns, or military raids would predict signs of pathology among exiles. The first sets of

hypotheses predicted that those who had these experiences would be showing more psychologically maladadaptive symptoms than those who had not. Only the SCL-90-R measures provided comparisons between those having had these experiences and those who had not. Dummy variables were created of those who had been tortured (1) or not (0), experienced raids (1) or not (0), and those affirming (1) each of the three demonstration experiences or not (0). While neither multiple regression of these trauma dummy variables to either GSI or CR-PTSD scores were significant, the Beta weights associated with the item dealing with having witnessed people (not relatives or friends) killed during demonstrations were significant. The magnitude of these relationships are expressed in the positive correlations between this dichotomous item and the GSI being 0.172 ($p < 0.05$) and the CR-PTSD being 0.195 ($p < 0.01$) across the total sample of 205 subjects.

The second set of trauma-maladjustment relationship hypotheses suggested that, for those experiencing these traumas, the magnitude of maladjustment would be related to the magnitude of these traumatic experiences. Selecting only those subjects who had experienced one or more of kinds of the traumatic events resulted in a sample of 133 traumatized subjects. These subjects more quantitative trauma measures were entered into multiple regression analyses with the the GSI and CR-PTSD. While a just

significant multiple regression was found between the quantitative trauma variables and the CR-PTSD scale (R = 0.310; F = 2.210, $p < .05$), this relationship was not significant for the GSI (R = 0.266; F = 1.616, $p < .15$). None of the Betas for any variable in either regression was significant, but the variable associated with witnessing deaths or injury during demonstrations was again modestly correlated with the CR-PTSD (r = 0.280, $p < 0.01$) and the GSI (r = 0.233, $p < 0.05$).

Torture Experiences. Multiple regression analyses revealed that POSTHEALTH was significantly predicted (R = 0.775) by PHYSTORT (Beta = 0.342, T = 3.78, p = < .00002) and PSYTORT (Beta = 0.476, T = 5.26, $p < .00001$). Pearson correlations showed the univariate relationship between POSTHEALTH and PHYSTORT to be r = 0.76 ($p < .0001$) and PSYTORT to be r = 0.79 ($p < .0001$).

For those traumatized in any way, no multiple regression or correlation revealed magnitudes of either physcial or psychological torture to be significantly related to either the GSI or the CR-PTSDBecause 62 of the 68 torture survivors had experienced both forms of torture and since PHYSTORT and PSYTORT were found to be highly correlated (r = 0.83, $p < .01$) it seemed worthwhile combining both torture scales for further analyses. This combined torture score did not predict general psychopathology or PTSD symptoms.

Thirty-one subjects identified torture experience as their most traumatic event on the IES. A significant multiple regression ($R = 0.34$, $p < 0.05$) using PSYTORT and PHYSTORT as predictors revealed that the experience of physical torture, particularly, predicted ($R = 0.34$; Beta = 0.363, $p = < .03$) those who had experienced it selecting torture as their most traumatic experience.

When the PSYTORT and PHYSTORT data of the 31 subjects were entered into multiple regressions, significant relationships were found were found to the IES Intrusive Thoughts scale ($R = 0.521$, $p < 0.02$) and the IES Avoidance scale ($R = 0.466$, $p < 0.05$). Particularly PSYTORT predicted both and had the only significant Betas in the regression equations. The magnitude of the univariate associations between PSYTORT and Intrusive Thoughts was $r = 0.31$ ($p = < .001$) and Avoidance was $r = 0.29$ ($p < 01$).

Raids Experiences. It was predicted that exiles who experienced raids by the South African army in southern African countries are likely to report signs of psychopathology. No multiple regression or correlation revealed any significant relationship between the experience of this event and any measure of maladjustment.

Demonstration Experiences. It was predicted that exiles who experienced police crackdowns during demonstrations in South Africa are likely to score higher on the psychopathology scales. Of the three items related to

these events, modest associations existed between witnessing people other than close friends or relatives being killed or injured during mass demonstrations and the GSI (r = 0.172, p < 0.05) and the CR-PTSD (r = 0.195, p < 0.01) across the total sample of 205 subjects. Looking at this particular demonstration item just on those who had some traumatic experience of the sort focussed on in this study, the relationships to CR-PTSD (r = 0.280, p < 0.01) and GSI (r = 0.233, p < 0.05) appear somewhat stronger.

Hypothesis 2: Mediators of Trauma-Adjustment Relationships

It was predicted that, in addition to the severity of trauma experienced, other variables will mediate symptomatology including availability of social support, personality variables, and other recently experienced negative life events.

Personality Variables. Personality variables were predicted to play a mediating role in the development of psychopathological symptoms. In a multiple regression analysis using EPQ-R scales as predictors, the GSI was substantially predicted (R = 0.650, p , 0.0001) by Neuroticism (Beta = 0.523, T = 6.179, p < .00001) and Psychoticism (Beta = 0.173, p < .03). The GSI was correlated strongly with Neuroticism (r = 0.61, p < .01), moderately with Psychoticism (r = 0.31, p < .01) and the Lie scale (r = -0.351), and nonsignificantly with Extraversion (r = 0.029). In a similar regression, the CR-PTSD was

predicted (R = .606, p < 0.00001) by both Neuroticism (Beta = 0.460, T = 5.146, p < .00001) and Pyschoticism (Beta = 0.184, T = 2.134, p < .03). The CR-PTSD was strongly associated with Neuroticism (r = 0.55, p < .00001), moderately associated with Psychoticism (r = 0.32, p < .001) and the Lie scale (r = -0.35, p < 0.01), and nonsignificantly associated with Extraversion (r = 0.01).

Social Support. Social support was predicted to have a beneficial effect on healing process for exiles with experience of detention, demonstrations, and raids. No significant multiple regressions or correlations were found between social support variables and both the GSI and the CR-PTSD.

Negative Life Events. It was predicted that reports of more recently experienced negative events would tend to be associated with reporting of psychopathology. No significant relationship was found between negative rating of such events and any of the measures of psychopathology.

DISCUSSION

The present study examined the psychological adjustment of South African exiles residing in Mazimbu and Dakawa as members of the African National Congress, a liberation movement. A particular goal of this study was to understand the relationships between their traumatic experiences under Apartheid and their current psychological adjustment. Various factors, such as, social support, personality, and other recently experienced life events were expected to have a beneficial or exacerbating effect on the adjustment of these traumatized exiles.

The Traumas of Apartheid

It should be quite clear from the results of this study that almost two-thirds of these mainly young South African exiles reported experiencing some undeniably traumatic experiences as a consequence of Apartheid in South Africa. To get some feeling of this, for example, the third of the exiles who were tortured reported experiencing an average of three kinds of physical and almost six kinds of psychological torture experiences. The "typical" experience of physical torture was to be beaten, forced to stand for long periods, and one other of a fairly long list of additional physical abuses. A typical experience of psychological torture was to be interrogated by "good/bad" interrogators, falsely accused of something, threatened with violence, verbally abused, given misleading information, and

put into solitary confinement. Beyond confirming the findings of the Foster et al. (1987) of the appalling treatment that South Africans have received while in detention in South Africa, this study presents evidence of the clear violation of Article One of The United Nations' Declaration Against Torture of 1975. Without repeating the details here, the results of this study present how even the additional third of the South African exiles studied who had not been tortured had been exposed to some pretty horrible experiences as a consequence of the political circumstances in South Africa.

The background against which any of the effects of traumatic experiences related to Apartheid have to be detected in this study is the constant of all study participants being exiles. As has been discussed earlier, the process of adaptation to exile may itself involve symptoms which include anxiety, depression, low self-esteem, vulnerability, anger/hostility, mistrust and feelings of insecuritiy, loneliness and ambivalence (Colat, 1981; Monoz, 1978; Ritterman, 1985). These possible psychological consequences of being an exile may make the detection of the effects of other traumatic experiences more difficult.

The Psychological Adjustment of Mazimbu/Dakawa Residents

The findings in this study clearly suggest that the Mazimbu and Dakawa residents were experiencing a high levels of distress, at least when compared to such groups as the

Hmong refugees in Westermeyer et. al.'s (1984) study and the African students in Mpumlwana's (1985) study. Compared to these groups, Mazimbu/Dakawa residents were experiencing level of distress approximating those of psychiatric outpatients (Derogatis et. al., 1973) who were seeking treatment. The symptoms which were most comparable with the outpatients included somatization, obsessive-compulsiveness, phobic anxiety, paranoid ideation and psychoticism.

Given their background histories already discussed above, it should be no surprise that these residents experienced some psychological maladjustment. Also, as earlier reported in the Results many of these residents had recently experienced other events which had negative impact on their lives. While a significant relationship was not found between the negative rating of these recently experienced events and psychopathology, the overalll high levels of such experiences could well have added to the overall stress which was felt by these residents.

The Effects of Traumatic Experiences

There is evidence in this study that experience of both physical and psychological torture strongly predicted the health problems at least within the first six months of the survivors' release from detention. Similar to Foster et. al.'s (1987) findings, these South African survivors experienced health problems at least suggesting that some suffered from the acute stage of PTSD.

Torture and Adjustment. As already noted, no direct relationship was found between the experience of torture and reports of current psychopathology. The nature of these results might lead to a conclusion that the torture survivors were coping well with their trauma. However, it is also important to remember that these survivors were part of the sample that found to be reporting high levels of psychopathology.

One possible explanation for this lack of relationship between torture and current psychopathology is that the daily hassles of the exile life were influencing the SCL-90-R more than the earlier experienced traumas. The GSI of the SCL-90-R may well not be sensitive enough, as a measure of general psychopathology, to pick up any specific effects of torture experiences. Also, the CR-PTSD being almost perfectly correlated with the GSI in the current sample, makes it quite dubious that this new scale could have discriminated the more specific symptoms of PTSD as intrusive memories, numbing, etc.

The findings of this study show that the number of different physical torture techniques experienced was predictive to identifying the 31 exiles of the 68 tortured who specified torture as their most traumatic experience. For these exiles selecting torture to rate on the IES, however, it is interesting that the number of different psychological tortures experienced that was the most

predictive of both the Intrusive and Avoidance scale scores. These results show that PHYSTORT and PSYTORT scales appeared to have different predictive roles. Alarmingly, they may suggest that the more "modern" psychological torture methods may contribute to the PTSD-inducing properties of the more traditional physical torture methods.

Demonstration Experiences and Adjustment. Of the three experiences of brutal police reactions to demonstrations tapped in the current study, witnessing people other than close friends or relatives getting killed or injured modestly predicted CR-PTSD scores and even more modestly predicted GSI scores. These findings suggest that this event seemed to be the only mass demonstration experience with long lasting traumatic impact. Similar to raids experiences, few people selected each mass demonstration event to rate on the IES, thereby making it difficult to enter the variables into any kind of analysis.

Hypothesized Mediating Variables

Personality Variables. The findings of this study clearly show that personality variables were the most powerful predictors of current psychopathology. As noted in the results section, Neuroticism was the strongest predictor of psychopathology among the Mazimbu and Dakawa residents.

Before I begin to interpret these results I should note that there have been some identified problems with the EPQ regarding cultural differences. These problems are mostly

related to Psychoticism (Mpumlwana, 1985; Schallow & Mpumlwana, Unpublished) and Lie scale which measures presumably measures dissimulation (Eysenck et. al., 1976). Despite cultural differences (South African versus British) which may affect scale interpretations, Lynn (1981) would argue that the data would not necessarily be invalidated. As already indicated in the result section, the confirmatory analysis done gave some assurance that the overall scoring of the EPQ-R items as suggested by Eysenck and Eysenck (1987) seems justified with this sample. However, these analyses suggest a very cautious interpretation of any results involving the Psychoticism scale.

The strong relationship between Neuroticism and psychopathology could be interpreted as suggesting that the Mazimbu and Dakawa residents with neurotic traits were highly distressed. While this interpretation may be valid, the strong correlation between Neuroticism and both the GSI ($\underline{r}$ = 0.61, $\underline{p}$ < .00001) and the CR-PTSD ($\underline{r}$ = 0.55, $\underline{p}$ < ,00001) might also, suggest that Neuroticism may similarly measure current symptomatology rather than an enduring personality diathesis to disorder. Although moderately related ($\underline{r}$ = 0.33, $\underline{p}$ < .0001), similar results were found were found in Mpumlwana's (1985) study where Neuroticism high scorers reported feeling distressed. The difference in the magnitude of the correlation coefficients between these two studies might be accounted for by significant difference

between Neuroticism means (see result section). as reported in the result section, the results of the t-test revealed that the mean score for the Mazimbu and Dakawa residents was significantly higher than that of the African student sample in Mpumlwana (1985) study and that of the British normative sample. Indeed, the difference in the amount of stress experienced by South African refugees when compared at least to the African students (e.g. GSI mean difference - $\underline{t}$ = 2.56, $\underline{p} < .001$; suggesting that the residents were more stressed than the African students), probably contributed to the difference of means (Lynn, 1981).

The mean score ($\underline{M}$ = 11.91, $\underline{SD}$ = 3.89) of the Lie scale for this study was elevated and significantly higher ($\underline{t}$ = 44.05, $\underline{p} < .001$) higher than that of the British normative sample ($\underline{M}$ = 6.80,, $\underline{SD}$ = 4.14; Eysenck, 1979). Dissimulation is often implicated when Lie scale scores are elevated (Eysenck et. al., 1977; Lynn, 1981). Given the significantly high mean score for the South African refugees in comparison with that of the British sample, one might conclude that these refugees were indeed dissimulating. Despite the conditions of anonymity under which they were tested, it seems that confidentiality was still a major issue for these residents. The suspecion that being an "American researcher" possibly linked with the CIA, could have been one of the reasons for motivation to dissimulate.

However, because of cultural differences, there are

limitations in making conclusive interpretations which are based on comparing the British normative sample with South African refugees. In a comparative study of personality between English subjects and Nigerians, Eysenck, Adelaja, and Eysenck (1977) found that the mean scores of the Lie scale for two Nigerian groups (one of which was tested under conditions of anonymity), were higher than that of the English subjects. While they did not completely rule out dissimulation as a possible interpretation, these authors suggested that cultural difference was partly responsible for the difference of means. Indeed, Mpumlwana (1985) found the mean Lie scale for African students in Canada to be significantly higher than that of the South African refugees in Mazimbu and Dakawa , and both mean scores were significantly higher than that of the British normative sample.

Social Support Variables The findings that the mediating role of social support was not confirmed in this study might suggest that this variable was not as important a factor for these residents as originally believed. Because the PSR scale has not been used extensively across cultures, it is difficult to interpret these findings without comparing the South African exiles' PSR scores with other comparable groups. On the face of it, they were generally acknowledging satisfactory levels of support from friends and family. The latter despite the fact that most

of the exiles were living in Tanzania while their families remained in South Africa. For whatever reasons, the lack of a relationship to social support very much goes against the findings of significant positive mediating effect of social support on adjustment.

Summary

This study documents the extent to which some extremely traumatic experiences have been associated with being an African in the system of Apartheid which has prevailed in the Republic of South Africa. Those South Africans in Mazimbu and Dakawa studied here, who all had made a decision to flee the oppression within South Africa, were evidencing quite high levels of psychological distress, which is hardly surprising given the hardships of exile in difficult Third World circumstances. Against this background of relatively high psychological maladjustment, neither the GSI as a general index, or the CR-PTSD, as a purportedly specific index of PTSD symptoms, revealed much in the way of associations with earlier traumatic experiences of the sort examined in this study. The IES, as intended, appeared to be a possibly more sensitive indicator of the presence of intrusive thoughts and consequent avoidance behaviors related to thise thoughts, symptoms which are the hallmarks of PTSD.

References

African National Congress of South Africa (1984). Torture is part of the system : State violence in South Africa and Namibia. London : A.N.C. Publications

African National Congress of South africa (1989). Pretoria's state terrorism. Newsbriefing, Vol 13, Weekending (May 7, 1989).

Allodi, F., & Cogwill, G. (1985). Ethical and psychiatric aspects of torture. Canadian Journal of Psychiatry, 27 98-102.

Allodi, F. (1991). Assessment and treatment of torture victims: A critical review, Journal of Nervous and Mental Disease, 179, Vol. 1, 4 - 11.

Allodi, F., Randall, G. R., Lutz, E. L., Quiroga, J., Zunzunegui, M., Kolff, C., Deutsch, A. & Doan, R. (1985). Physical and psychiatric effects of torture : Two Medical Studies. In E. Stover & E. O. Nightingale (Eds.), The Breaking of Bodies & Minds : Torture, Psychiatric Abuse, and the Health Professions (pp. 58-77).

Allodi, F., & Rojas, A. (1985). The health and adaptation of victims of political violence in Latin America. In P. Pichot, P. Berner, R. Wolf, et. al. (Eds), Psychiatry, the state of the art: Vol 6. Drug dependency and alcoholism, forensic psychiatry, military psychiatry (pp. 243 - 248). New York: Plenum.

American Psychiatric Association (1987). Diagnostic and Statistical Manual Disorders Revised (3rd ed.), Washington, D.C. : Author.

Amnesty International (1984). Torture in the Eighties, London : AI publications.

Anderson, J.C., & Gerbing, D.W. (1984). The effect of sampling error on convergence, improper solutiuons, and goodness-of-fit indices for

maximum likelihood confirmatory factor analysis. Psychometrika, 49, 155-173.

Bard, M., & Sangrey, D. (1979). The crime victim's book, New York : Basic Books.

Beck, A. T., Rush, A. J., Shaw, B. F. & Emery, G. (1985). Cognitive therapy of depression., New York : The Guilford Press.

Boomsma, A. (1982). The robustness of LISREL against small sample sizes in factor analysis models. In K.G. Joreskog & Wold (Eds.), Systems under indirect observation (Part 1, pp. 149 - 174). Amsterdam: North-Holland.

Boomsma, A. (1985). Nonconvergence, improper solutions, and starting values in LISREL maximum likelihood estimation. Psychometrika, 50, 229 - 242.

Cattell, R.B. (1978). The scientific use of factor analysis, New York: Plenum Press

Chikane, F. (1986). Children in turmoil: the effects of the unrest on township children. In Burman & Reynolds (Eds.), Growing up in a divided society: The contexts of childhood in South Africa, Galvin and Sales.: Cape Town

Coates, D., Wortman, C. B., & Abbey, A. (1979). Reactions to victims. In I. H. Frieze, D. Bar-Tal, & J. S. Carrol (Eds.), New approaches to social problems : Applications of attribution theory, San francisco : Jossey-Bass.

Danieli, Y. (1985). The treatment and prevention of long-term effects and intergenerational transmission of victimization : A lesson form Holocaust survivors and their children. In C. R. Figley (Ed.), Trauma

and its wake : The study and treatment of post-traumatic stress disorder, New York : Basic Books.

Derogatis, L. R., & Cleary, P. A. (1977). Confirmation of the dimensional structure of the SCL-90 : A study in construct validation. Journal of Clinical Psychology, 33, 981-989

Dommisse, J. (1987). The state of psychiatry in South Africa today. Soc. Sci. Med. 24, 749-761

Eysenck, H. F. (1979). Personality factors in a random sample of the population, Psychological Reports, 44, 1023-1027

Eysenck, H. J. (1967). The biological basis of personality, Thomas, Springfield, Ill.

Eysenck, H. J., & Eysenck, S. B. G. (1976). Psychoticism as a dimension of personality, London : Hodder & Stoughton

Eysenck, H. J., Eysenck, S. B. G. (1969). The structure and measurement of personality, London : Routledge & Paul

Eysenck, S. B. G., Adelaja, B., & Eysenck, H. S. (1977). A comparative study of personality in Nigerian and English subjects, The Journal of Social Psychology, 102, 171-178

Eysenck, S.B.G., Eysenck, H.J., & Barrett, P. (1985). A revised version of the Psychoticism scale, Personality of Individual Differences, Vol. 6, No. 1, 21 - 29.

Eysenck, H. J., & Rachman, S. (1965). The causes and cures of neurosis, San Diego : Knapp

Foster, D., Davis, D. & Sandler, D. (1987). Detention & torture in South Africa : Psychological, legal, and historical studies, David Philip : Cape

Foy, D. W., Donahoe, C. P., Carroll, R. E. M., Callers, J. & Reno, R. (1987). Posttraumatic stress disorder. In L. Michelson & L. M. Ascher (Eds.), Anxiety and stress disorders : Cognitive-behavioral assessment and treatment, (pp. 361-378).

Foa, E.B., Steketee, G., & Rothbaum, B.O. (1989). Behavioral/cognitive conceptualizations of post-traumatic stress disorder. Behavior Therapy, 20, 155-176.

Frederick, C. (1980). Effects of natural versus human-induced violence upon victims. Evaluation and change, Minneapolis Medical Research Foundation, Inc. NIMH, Mental Health Services Development Branch. Special Issue: Services for Survivor (is as titled in original issue), (pp. 71 - 75).

Friedman, K., Bischoff, H., Davis, R., & Person, A. (1982). Samaritan blues. Psychology Today, July, 26 - 28.

Gecas, V. (1982). The self-concept. Anual Review of Sociology, 8, 1-33

Gerbin, D.W., & anderson, J.C. (1985). The effects of sampling error and model characteristics on parameter estimation for maximum likelihood confirmatory factor analysis. Multivariate Behavioral Research, 20, 255 - 271

Gibson, J. T., & Haritos-Fatouro, M. (1986). The education of a torturer. There is cruel method in the madness of teaching people to torture. Almost anyone can learn it, Psychology Today, 50-58

Guidano, V. F., & Liotti, G. (1983). Cognitive processes and emotional disorders : A structural approach to psychotherapy, New York : The Guilford Press

Heller, K., Swindle, Jr., R., & Dusenbury, L. (1967). Component social support processes : Comments and intergration, Journal of Consulting and Clinical Psychology, 54, 466-470

Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale, Journal of Psychosomatic Research, 11, 213-218

Horowitz, M.J. (1986). Stress-response syndromes (2nd. ed.). Northvale, NJ: Jason Aronson Inc.

Horowitz, M. J., Wilner, N., Marmar, C., & Krupnick, J. (1980). Pathology grief and the activation of latent self-images, American Journal of Psychology, 137, 1137-1162

Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). Impact of event scale : A measure of subjective stress, Psychological Medicine, 41, 209-218

Husaini, B.A. (1982). Stress and psychiatric symptoms : Personality and social support as buffers, Journal of Community Psychology, 10, 291-292

Janoff-Bulman, R. (1985). The aftermath of victimization : Rebuilding shattered assumptions, In R. Figley (Ed.), Trauma and its wake, (pp. 15-35). New York : Brunner/Mazel.

Jones, J.C., & Barlow, D.H. (1990). the etiology of posttraumatic stress disorder. Clinical Psychology review, 10, 299 - 328.

International Defence & Aid Fund (1985). Massacre at Maseru: South African aggression against Lesotho. Fact Paper on Southern africa, No. 12

Jegede, R. O. (1981). Social and personality characteristics of Nigerian medical students, Journal of Psychology, 108, 155-163

Karl, G., Joreskog, & Dag Sorbom (1984). LISREL VI : analysis of linear structural relationships by maximum likelihood, instrumental variables, and least squares methods. Uppsala : University of Uppsala

Keane, T.M., Fairbank, J.A., Caddell, J.M., Zimering, R.T., & Bender, M.E. (1985). a behavioral approach to assessing and treating post-traumatic stress disorder in Vietnam Veterans, In R. Figley (Ed.), Trauma and its wake, (pp. 257 - 313). New York: Brunner/Mazel.

Keane, T.M., Zimering, R.T., & Caddell, J.M. (1985). A behavioral formulation of post-traumatic stress disorder in Vietnam veterans. The Behavior Therapist, 8, 9 - 12.

Kobasa, S. C. (1979). Personality and resistance to illness, American Journal of Community Psychology, 7, 413-423

Kobasa, S. C., Maddi, S. R., & Courington, S. (1981). Personality and constitution as mediators in the stress-illness relationship, Journal of Health and Social Behavior, 22, 368-378

Krupnick, J. (1980). Brief psychotherapy with victims of violent crime, Victomology, 5, 347-354

Krupnick, M. J. Wilner, N., Marmar, C. & Krupnick, J. (1980). Pathology grief and the activation of latent self-images, American Journal of Psychiatry, 137 1137-1162

Lazarus, R. S. (1966). Psychological stress and the coping process, New York : McGraw-Hill

Lazarus, R. S., & Flkman, S. (1984). Stress, appraisal, and coping, New York : Springer Publishing

Loehlin, J.C. (1985). Fitting heredity-environment models jointly to twin and adoption data from the California Psychological Inventory. Behavior Genetics, 15, 199 - 221.

Loehlin, J.C. (1987). Latent variable models: An introduction to factor, path, and structural analysis, New Jersey: Lawrence Erlbaum Associates, Inc.

Meyer, C. B., & Taylor, S. E. (1986). Adjustment to rape, American Psychological Association, 50, 1226-1234

Mpumlwana, V. B. N. (1988). An analysis of exile syndrome and torture syndrome, Manuscript submitted for publication

Mpumlwana, V. B. N. (1985). Adaptation process of African immigrants in Canada, Unpublished master's thesis, University of Manitoba. Winnipeg. MB.

Mzimela, A. S. (1983). Apartheid : South African Naziism, New York : Vantage Press

Perloff, L. S. (1983). Perceptions of vulnerability to victimization, Journal of Social Issues, 39, 41-69

Ritterman, M. (1985). Symptoms, social and personal freedom, Journal of Strategic and Systematic Therapies, 4, 48-63

Rosenberg, M. (1981). The self-concept : Social product and social force, In M. Rosenberg & R. H. Turner (Eds.), Social psychology : Sociological perspectives (pp. 593-625), New York : Basic Books

Rudolph, H. (1984). Security terrorism torture : Detainees rights in South Africa and Israel : A comparative study, London : IDAF Research & Information Dept.

Sales, E., Baum, M., & Shorte, B. (1984). Victim readjustment following assault, Journal of Social Issues, 40, 117-136

Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes : Development of the Life Experiences Survey, Journal of Consulting and Clinical Psychology, 46, 932-946

Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1976). The Life Experience Survey : Preliminary findings, Seattle

Shrauger, J. S., & Schoeneman, T. J. (1979). Symbolic interactionist view of self-concept : Through the working glass darkly, Psychological Bulletin, 86, 549-573

Silver, R. L., Boon, C., & Stores, M. L. (1983). Searching for meaning in misfortune : Making sense of incest, Journal of Social Issues, 39, 83-103

Silver, R. L., & Wortman, C. B. (1980). Coping with undesirable life events. In J. Garber, & M. E. P Seligman (Eds.), Human helplessness, New York : Academic Press

Solkoff, N., gray, P., & Keill, S. (1986). Which Vietnam veterans develop P.T.S.D.?, Journal of Clinical Psychology, 42, 687-698

Stover, E., & Nightingale, E. (1985). The breaking of bodies and minds : Torture, psychiatric abuse, and the health professions, New York : Freeman W. H. & Co.

Taylor, S. E., Wood, I. V., & Lichtman, R. R. (1983). It could be worse : Selective evaluation as a response to victimization, Journal of Social Issues, 39, 19-40

Thoits, P. A. (1986). Social support as coping assistance, Journal of Consulting and Clinical Psychology, 54, 416-423

Thoits, P. A. (1985). Social support and psychological well-being, : Theoretical possibilities, In I. G. Sarason & B. R. Sarason (Eds.), Social support : Theory , research, and applications (pp. 51-72), The Hague, The Netherlands : Martinus, Nijhoff

Turner, R. J., Frankel, B. G., & Levin, D. M. (1983). Social support : Conceptualization, measurement, and implications for mental health, Research in Community and Mental Health, 3, 67-111.

Van der Kolk, B.A., Boyd, H., Krystal, J., & greenburg, M. (1984). Post-traumatic stress disorder as a biologically based disorder: Implications of the animal model of inescapable shock. In B.A. Van der Kolk (Ed.), Post-traumatic stress disorder: Psychological and biological sequelae (pp. 124 - 134). Washington, DC: American Psychiatric Press.

Walbridge, H., & Schallow, J. R. (1987). The Existential Survey, University of Manitoba, Winnipeg. MB.

Weiss, R. (1974). The provisions of social relationship, In Z. Rubin (Ed.), Doing unto others, Englewood Cliff, N. J. : Prentice-Hall

Wolfenstein, M. (1957). Disaster : A psychlogical essay, Glencoe, Ih : Free Press

Zilberg, N. J., Weiss, D. S., & Horowitz, M. J. (1982). Impact of event scale : A cross-validation study and some empirical evidence supporting a conceptual model of stress response syndromes, Journal of Consulting and Clinical Psychology, 50 407-414

Westermeyer, J., Neider, J., & Tou Fu Vang (1984). Acculturation and mental health : A study of Hmong refugees at 1.5 and 3.5 years postmigration, Social Science Medicine, 18 87-93

Wheaton, B. (1982). Uses and abuses of the Langner Index : A re-examination of findings on psychological distress. In D. Mechanic (Ed.), Symptoms, illness behavior, and help-seeking (pp. 25-53)

Appendix A

I - BACKGROUND QUESTIONNAIRE

On the pages that follow you will find a series of questions on your personal background. Circle one answer for each question. Explain where necessary.

1. Sex: a) Male b) Female

2. How old are you ? _____

3. What is the highest level of formal education you have achieved ?

   _____

4. What is your current occupation now ? For example are you a student, are you working in the farm, factory, etc.? Indicate.

   _____

5. Before you left South Africa what was your occupation ? For example, were you in school, you had a job, you were not working ? Indicate.

   _____

6. Were you ever married while you were in S.A.?

   a) Yes b) No

7. Presently:

   a. living with spouse and children (or expecting one)
   b. living with spouse, no children
   c. living with children, or family (no husband or wife)
   d. living in a hostel with comrades
   e. living alone
   f. living with a girl friend (if you are male) or boy friend (if female).

8. If unmarried, are you:

a. engaged ?
b. going steady ?
c. dating several (men/women) frequently ?
f. dating several (men/women) infrequently ?
g. not dating ?

9. When did you leave S.A. ?

_____

10. When (in order) and how long did you live in places before coming to Mazimbu (indicate whether or not you were in refugee camp there).

	Where?	How Long?	Refugee Camp?	
1)	_____	_____	Yes	No
2)	_____	_____	Yes	No
3)	_____	_____	Yes	No
4)	_____	_____	Yes	No

11. When you left S.A. did you leave:

a) alone ?
b) with other comrades ?
c) with your children/child but without your spouse ?
d) with spouse without children ?
e) with parents ?

II - EXPERIENCE OF DETENTION AND RAIDS OUTSIDE SOUTH AFRICA

1. Indicate whether or not you were ever detained or arrested outside S.A. before you came to Mazimbu and for how long.

Imprisoned ?	How many times ?	For how long in all ?
Yes OR No	_____	_____

2. Were detained/arrested for political or nonpolitical reasons ?
   Explain _____

3. Can you describe your experience during detention/imprisonment? e.g. torture, interrogation, threats about deportation, etc. The examples under **number 8 and 9 under Experience in S. Africa** may be helpful as you try to remember some of your experiences.

_____

_____

_____

_____

4. Did you ever experience S. African raids in one of southern African countries ?

   a) Yes b) No

5 If yes, did you get physically injured in the raid(s) ?

   a) Yes b) No

6 Did any of your family members get killed or severely injured in the raid(s) ?

   a) Yes b) No

7. Did any of your close friends/comrades get severely injured or killed in the raid(s) ?

   a) Yes b) No

8. Did the killing take place in your presence ?

   a) Yes b) No

9. Did any body else other than friend or relative get killed in the raids in your presence ?

   a) Yes b) No

10 Did you escape the killing narrowlly ?

   a) Yes b) No

11. If so, how ? Explain.

_____

_____

III - TORTURE AND MASS DEMONSTRATION EXPERIENCES.

The questions below are about your traumatic experiences associated with detention, torture, imprisonment, and injuries during demonstrations in South Africa. Please try and give as accurate information as you can possibly remember.

1. Were you ever detained ?

   a) Yes b) No

2. When (in order) were you ever detained and for how long in all ?

	When (Year)	Under which law/section	Length of time in all
a)	_____	_____	_____
b)	_____	_____	_____
c)	_____	_____	_____
d)	_____	_____	_____
e)	_____	_____	_____

3. Were you charged? a) Yes b) No

4. Did you serve? a) Yes For how long? _____
   b) No Why not? _____

5. During detention I was:

   a. interrogated and tortured
   b. tortured but was never interrogated
   c. interrogated only

6. How many interrogation/torture sessions did you have ?

_____

7. How many people on the avarage were involved during interrogation/torturesessions at a time ?

_____

PHYSICAL TORTURE METHODS

8. Did you experience any of the following Physical Torture methods?

Method	Yes	No	Number of times
Beatings	___	___	_____
Forced standing	___	___	_____
Maintain abnormal body position	___	___	_____
Forced gym exercises	___	___	_____
Bag over head	___	___	_____
Electric shock	___	___	_____
Food depri-vation	___	___	_____
Strangu-lation	___	___	_____
Torture in genitals	___	___	_____
Rape	___	___	_____
List other methods:-			

_____ _____ _____

_____ _____ _____

_____ _____ _____

PSYCHOLOGICAL TORTURE METHODS

9. Did you experience any of the following Psychological Torture methods ?

Method	Yes	No
False accusation	____	____
Solitary confinement	____	____
Verbal abuse	____	____
Threatened violence	____	____
Good/bad interrogators	____	____
Misleading information	____	____
Witness/knowledge of others' torture	____	____
Threats of execution - self or family	____	____
Offer rewards	____	____
Forced to undress	____	____
Constant interrogation	____	____
Sleep deprivation	____	____

List other methods: _____

_____

_____

10. Usually one of the aims of torturers is to make a person sign a statement about the person's political activities as well as those of others. Did this happen to you ?

a) Yes b) No

11. During dention did you have any need for doctor's attention ?

a) Yes b) No

12. If so, did you obtain it ? a) Yes b) No

13. Were you satisfied with the doctor's treatment ? a) Yes b) No
Explain. _____

14. After you were released what kind of reception did you receive from your friends, comrades, and family members ? (e.g. were they supportive ?)

_____

_____

15. Were you satisfied by the reception ? Explain and rate the satisfaction, from very satisfied to very unsatisfied.
sat = satisfied; dissat = dissatisfied; mod. =moderately

Very sat.	Mod. sat.	Somehow sat.	Neutral feelings	Somehow dissat.	Mod. dissat.	Very dissat.
3	2	1	0	-1	-2	-3

POST-DETENTION HEALTH PROBLEMS

16. Did you suffer from any of the following health problems within six months after you were released from detention ?

Health problems	Yes
Difficulty sleeping	_____
Headaches	_____
Excessive fantacy	_____
Weight loss	_____
Appetite loss	_____
Difficulty concentration	_____
Nightmares	_____
Tiredness	_____
Difficulty memory	_____
Stomach pains	_____
Restlessness	_____
Depressed	_____
Constipation	_____
Shivering	_____
Crying	_____
Nausea	_____
Sweating	_____

List other problems:-

_____

_____

17. Did you receive any medical attention immediately after detention? Explain.

_____

_____

18. Did you get any help from a psychologist or psychiatrist within the first six months after detention ?

a) Yes b) No

19. Did you get any medical help from a traditional doctor within the first six months after detention ?

a) Yes b) No

POLITICAL MASS DEMONSTRATION EXPERIENCE

20. Were you ever injured during demonstration ?

    a) Yes Explain _____ b) No

21. If you were injured did you receive any medical attention ?

    Explain. _____

22. Did any of your relatives/friends get injured or killed ? Explain.

_____

_____

23. Did you see anybody (other than your relative or friend) injured or killed during demonstration ? Explain.

_____

APPENDIX B

PSR

We would like to know something about your relationships with other people. Please read each statement below and decide how well the statement describes you. For each statement, show your answer by indicating to the left of the item the number that best describes how you feel. The numbers represent the following answers.

1 = Very like me
2 = Much like me
3 = Somewhat like me
4 = Not very much like me
5 = Not at all like me

___ 1. When I'm with my friends, I feel completely able to relax and be myself.
___ 2. I share the same approach to life that many of my friends do.
___ 3. People who know me trust me and respect me.
___ 4. No matter what happens, I know that my family will always be there for me should I need them.
___ 5. When I want to go out to do things I know that many of my friends would enjoy doing these things with me.
___ 6. I have at least one friend I could tell anything to.
___ 7. Sometimes I'm not sure if I can completely rely on my family.
___ 8. People who know me think I am good at what I do.
___ 9. I feel very close to some of my friends.
___ 10. People in my family have confidence in me.
___ 11. My family lets me know they think I am a worth while person.
___ 12. People in my family provide me with help in finding solutions to my problems.
___ 13. My friends would take the time to talk over my problems should I ever want to.
___ 14. I know my family will always stand by me.
___ 15. Even when I am with my friends I feel alone.

APPENDIX C

Instructions: Please answer each question by putting a circle around the 'YES' or the 'NO' following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the questions.

PLEASE REMEMBER TO ANSWER EACH QUESTION

1. Do you have many different hobbies? ..... YES NO
2. Do you stop to think things over before doing anything? ..... YES NO
3. Does your mood often go up and down? ..... YES NO
4. Have you ever taken the praise for something you knew someone else had really done? ..... YES NO
5. Do you take much notice of what people think? ..... YES NO
6. Are you a talkative person? ..... YES NO
7. Would being in debt worry you? ..... YES NO
8. Do you ever feel 'just miserable' for no reason? ..... YES NO
9. Do you give money to charities? ..... YES NO
10. Were you ever greedy by helping yourself to more than your share of anything? ..... YES NO
11. Are you rather lively? ..... YES NO
12. Would it upset you a lot to see a child or an animal suffer? ..... YES NO
13. Do you often worry about things you should not have done or said?.. YES NO
14. Do you dislike people who don't know how to behave themselves?..... YES NO
15. If you say you will do something, do you always keep your promise no matter how inconvenient it might be? ..... YES NO
16. Can you usually let yourself go and enjoy yourself at a lively party? ..... YES NO
17. Are you an irritable person? ..... YES NO
18. Should people always respect the law? ..... YES NO
19. Have you ever blamed someone for doing something you knew was really your fault? ..... YES NO
20. Do you enjoy meeting new people? ..... YES NO
21. Are good manners very important? ..... YES NO
22. Are your feelings easily hurt? ..... YES NO
23. Are all your habits good and desirable ones? ..... YES NO
24. Do you tend to keep in the background on social occasions? ..... YES NO
25. Would you take drugs which may have strange or dangerous effects?.. YES NO
26. Do you often feel 'fed-up'? ..... YES NO
27. Have you ever taken anything (even a pin or button) that belonged to someone else? ..... YES NO
28. Do you like going out a lot? ..... YES NO

29. Do you prefer to go your own way rather than act by the rules? .... YES NO

30. Do you enjoy hurting people you love? ..... YES NO

31. Are you often troubled about feelings of guilt? ..... YES NO

32. Do you sometimes talk about things you know nothing about? ..... YES NO

33. Do you prefer reading to meeting people? ..... YES NO

34. Do you have enemies who want to harm you? ..... YES NO

35. Would you call yourself a nervous person? ..... YES NO

36. Do you have many friends: ..... YES NO

37. Do you enjoy practical jokes that can sometimes really hurt people? YES NO

38. Are you a worrier? ..... YES NO

39. As a child did you do as you were told immediately and without grumbling? ..... YES NO

40. Would you call yourself happy-go-lucky? ..... YES NO

41. Do good manners and cleanliness matter much to you? ..... YES NO

42. Have you often gone against your parents' wishes? .....YES NO

43. Do you worry about awful things that might happen? ..... YES NO

44. Have you ever broken or lost something belonging to someone else?.. YES NO

45. Do you usually take the initiative in making new friends? ..... YES NO

46. Would you call yourself tense or 'highly-strung'? ..... YES NO

47. Are you mostly quiet when you are with other people? ..... YES NO

48. Do you think marriage is old-fashioned and should be done away with? ..... YES NO

49. Do you sometimes boast a little? ..... YES NO

50. Are you more easy-going about right and wrong than most people? ... YES NO

51. Can you easily get some life into a rather dull party? ..... YES NO

52. Do you worry about your health? ..... YES NO

53. Have you ever said anything bad or nasty about anyone? ..... YES NO

54. Do you enjoy co-operating with others? ..... YES NO

55. Do you like telling jokes and funny stories to your friends? ..... YES NO

56. Do most things task the same to you? ..... YES NO

57. As a child were you ever cheeky to your parents? ..... YES NO

58. Do you like mixing with people? ..... YES NO

59. Does it worry you if you know there are mistakes in your work? .... YES NO

60. Do you suffer from sleeplessness? ..... YES NO

61. Have people said that you sometimes act too rashly? ..... YES NO

62. Do you always wash before a meal? ..... YES NO

63. Do you nearly always have a 'ready answer' when people talk to you? ..... YES NO

64. Do you like to arrive at appointments in plenty of time? ..... YES NO

65. Have you often felt listless and tired for no reason? ..... YES NO

66. Have you ever cheated at a game? ..... YES NO

67. Do you like doing things in which you have to act quickly? ..... YES NO

68. Is (or was) your mother a good woman? ..... YES NO

69. Do you often make decisions on the spur of the moment? ..... YES NO

70. Do you often feel life is very dull? ..... YES NO

71. Have you ever taken advantage of someone? ..... YES NO

72. Do you often take on more activities than you have time for? ..... YES NO

73. Are there several people who keep trying to avoid you? ..... YES NO

74. Do you worry a lot about your looks? ..... YES NO

75. Do you think people spend too much time safeguarding their future with savings and insurance? ..... YES NO

76. Have you ever wished that you were dead? ..... YES NO

77. Would you dodge paying taxes if you were sure you could never be found out? ..... YES NO

78. Can you get a party going? ..... YES NO

79. Do you try not to be rude to people? ..... YES NO

80. Do you worry too long after an embarrassing experience? ..... YES NO

81. Do you generally 'look before you leap'? ..... YES NO

82. Have you ever insisted on having your own way? ..... YES NO

83. Do you suffer from 'nerves'? ..... YES NO

84. Do you often feel lonely? ..... YES NO

85. Can you on the whole trust people to tell the truth? ..... YES NO

86. Do you always practice what you preach? ..... YES NO

87. Are you easily hurt when people find fault with you or the work you do? ..... YES NO

88. Is it better to follow society's rules than go your own way?..... YES NO

89. Have you ever been late for an appointment or work? ..... YES NO

90. Do you like plenty of bustle and excitement around you? ..... YES NO

91. Would you like other people to be afraid of you? ..... YES NO

92. Are you sometimes bubbling over with energy and sometimes very sluggish? ..... YES NO

93. Do you sometimes put off until tomorrow what you ought to do today? YES NO

94. Do other people think of you as being very lively? ..... YES NO

95. Do people tell you a lot of lies? ..... YES NO

96. Do you believe one has special duties to one's family? ..... YES NO

97. Are you touchy about some things? ..... YES NO

98. Are you always willing to admit it when you have made a mistake? .. YES NO

99. Would you feel very sorry for an animal caught in a trap? ..... YES NO

100. When your temper rises, do you find it difficult to control?..... YES NO

APPENDIX D

The Life Experiences Survey

Listed below are a number of events which sometimes bring about change in the lives of those who experience them and which necessitate social readjustment. Please check those events which you have experienced in the recent past and indicate the time period during which you have experienced each event. Be sure that all check marks are directly across from the items they correspond to.

Also, for each item checked below, please indicate the extent to which you viewed the event as having either a positive or negative impact on your life at the time the event occured. That is, indicate the type and extent of impact that the event had. A rating of -3 would indicate an extremely negative impact. A rating of 0 suggests no impact either positive or negative. A rating of +3 would indicate and extremely positive impact.

Please note the following abbreviations:
extr = extremely mod = moderately
some = somewhat slight = slightly
-ve = negative +ve = positive
mo = month yr = year

	0 to 6mo	7mo to 1yr	extr -ve	mod -ve	some -ve	no impact	slight +ve	mod +ve	extr +ve
1. Marriage			-3	-2	-1	0	+1	+2	+3
2. Detention in jail or comparable institution			-3	-2	-1	0	+1	+2	+3
3. Death of spouse			-3	-2	-1	0	+1	+2	+3
4. Major change in sleeping habits (much more or much less sleep)			-3	-2	-1	0	+1	+2	+3
5. Death of close family member:									
a. mother			-3	-2	-1	0	+1	+2	+3
b. father			-3	-2	-1	0	+1	+2	+3
c. brother			-3	-2	-1	0	+1	+2	+3
d. sister			-3	-2	-1	0	+1	+2	+3
e. grandmother			-3	-2	-1	0	+1	+2	+3
f. grandfather			-3	-2	-1	0	+1	+2	+3
g. other			-3	-2	-1	0	+1	+2	+3
6. Major change in eating habits (much more or much less food intake)			-3	-2	-1	0	+1	+2	+3

7. Death of close friend	-3	-2	-1	0	+1	+2	+3
8. Male: Wife/girlfriend pregnancy	-3	-2	-1	0	+1	+2	+3
9. Female: Pregnancy	-3	-2	-1	0	+1	+2	+3
10. Change work situation (different work responsibility, major change in working conditions, working hours etc.)	-3	-2	-1	0	+1	+2	+3
11. Serious illness or injury ofclose family member:							
a. father	-3	-2	-1	0	+1	+2	+3
b. mother	-3	-2	-1	0	+1	+2	+3
c. brother	-3	-2	-1	0	+1	+2	+3
d. sister	-3	-2	-1	0	+1	+2	+3
e. grandmother	-3	-2	-1	0	+1	+2	+3
f. grandfather	-3	-2	-1	0	+1	+2	+3
g. spouce	-3	-2	-1	0	+1	+2	+3
h. other (specify)	-3	-2	-1	0	+1	+2	+3
12. Sexual difficulties	-3	-2	-1	0	+1	+2	+3
13. Major change in closeness of family members (increased or decreased closeness)	-3	-2	-1	0	+1	+2	+3
14. Gaining a new family member	-3	-2	-1	0	+1	+2	+3
15. Change of residence	-3	-2	-1	0	+1	+2	+3
16. Marital seperation from mate (due to conflict)	-3	-2	-1	0	+1	+2	+3
17. Major change in church activities (increased or decreased attendance)	-3	-2	-1	0	+1	+2	+3
18. Marital reconciliation with mate	-3	-2	-1	0	+1	+2	+3
19. Major change in number of arguments with spouse (a lot more or a lot less arguments)	-3	-2	-1	0	+1	+2	+3
20. Major change in usual type and/or amount of recreation	-3	-2	-1	0	+1	+2	+3
21. Major personal illness or injury	-3	-2	-1	0	+1	+2	+3
22. Major change in social							

activities, e.g parties, visiting (increased or decreased participation)	-3	-2	-1	0	+1	+2	+3
23. Divorce	-3	-2	-1	0	+1	+2	+3
24. Serious injury or illness of close friend	-3	-2	-1	0	+1	+2	+3
25. Seperation from spouse (due to work, travel, etc.)	-3	-2	-1	0	+1	+2	+3
26. Engagement	-3	-2	-1	0	+1	+2	+3
27. Breaking up with boyfriend or girlfriend	-3	-2	-1	0	+1	+2	+3
28. Reconciliation with boyfriend or girlfriend	-3	-2	-1	0	+1	+2	+3

Other recent experiences which hace had an impact on your life. List and rate.

29. _____	-3	-2	-1	0	+1	+2	+3
30. _____	-3	-2	-1	0	+1	+2	+3

APPENDIX E

SYMPTOM CHECKLIST

nstructions: Below are a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please circle one of the numbers to the right that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE PAST WEEK INCLUDING TODAY. Circle one number for each problem and do not skip any items. If you change your mind, erase your first choice completely. Please read the example below before beginning.

---

xample:

OW MUCH WERE YOU BOTHERED BY:

	Not at All	A Little Bit	Moderately	Quite a Bit	Extremely
Backaches	0	1	2	3	4
Headaches	0	1	2	3	4
Nervousness or shakiness inside	0	1	2	3	4
Unwanted thoughts, words, or ideas that won't leave your mind	0	1	2	3	4
Faintness or dizziness	0	1	2	3	4
Loss of sexual interest or pleasure	0	1	2	3	4
Feeling critical of others	0	1	2	3	4
The idea that someone else can control your thoughts	0	1	2	3	4
Feeling others are to blame for most of your troubles	0	1	2	3	4
Trouble remembering things	0	1	2	3	4
Worried about sloppiness or carelessness	0	1	2	3	4
Feeling easily annoyed or irritated	0	1	2	3	4
Pains in heart or chest	0	1	2	3	4
Feeling afraid in open spaces or on the streets	0	1	2	3	4

	Not at All	A Little Bit	Moderately	Quite a Bit	Extremely
	0	1	2	3	4
Feeling low in energy or slowed down	0	1	2	3	4
Thoughts of ending your life	0	1	2	3	4
Hearing voices that other people do not hear	0	1	2	3	4
Trembling	0	1	2	3	4
Feeling that most people cannot be trusted	0	1	2	3	4
Poor appetite	0	1	2	3	4
Crying easily	0	1	2	3	4
Feeling shy or uneasy with the opposite sex	0	1	2	3	4
Feeling of being trapped or caught	0	1	2	3	4
Suddenly scared for no reason	0	1	2	3	4
Temper outbursts that you could not control	0	1	2	3	4
Feeling afraid to go out of your house alone	0	1	2	3	4
Blaming yourself for things	0	1	2	3	4
Pains in lower back	0	1	2	3	4
Feeling blocked in getting things done	0	1	2	3	4
Feeling lonely	0	1	2	3	4
Feeling blue	0	1	2	3	4
Worrying too much about things	0	1	2	3	4
Feeling no interest in things	0	1	2	3	4
Feeling fearful	0	1	2	3	4

	Not at All	A Little Bit	Moderately	Quite a Bit	Extremely
. Your feelings being easily hurt	0	1	2	3	4
. Other people being aware of your private thoughts	0	1	2	3	4
. Feeling others do not understand you or are unsympathetic	0	1	2	3	4
. Feeling that people are unfriendly or dislike you	0	1	2	3	4
. Having to do things very slowly to insure correctness	0	1	2	3	4
. Heart pounding or racing	0	1	2	3	4
. Nausea or upset stomach	0	1	2	3	4
. Feeling inferior to others	0	1	2	3	4
. Soreness of your muscles	0	1	2	3	4
. Feeling that you are watched or talked about by others	0	1	2	3	4
. Trouble falling asleep	0	1	2	3	4
. Having to check and double-check what you do	0	1	2	3	4
. Difficulty making decisions	0	1	2	3	4
. Feeling afraid to travel on buses, subways, or trains	0	1	2	3	4
. Trouble getting your breath	0	1	2	3	4
. Hot or cold spells	0	1	2	3	4
. Having to avoid certain things, places, or activities because they frighten you	0	1	2	3	4
. Your mind going blank	0	1	2	3	4
. Numbness or tingling in parts of your body	0	1	2	3	4
. A lump in your throat	0	1	2	3	4

	Not at All	A Little Bit	Moderately	Quite a Bit	Extremely
4. Feeling hopeless about the future	0	1	2	3	4
5. Trouble concentrating	0	1	2	3	4
6. Feeling weak in parts of your body	0	1	2	3	4
7. Feeling tense or keyed up	0	1	2	3	4
8. Heavy feelings in your arms or legs	0	1	2	3	4
9. Thoughts of death or dying	0	1	2	3	4
0. Overeating	0	1	2	3	4
1. Feeling uneasy when people are watching or talking about you	0	1	2	3	4
2. Having thoughts that are not your own	0	1	2	3	4
3. Having urges to beat, injure or harm someone	0	1	2	3	4
4. Awakening in the early morning	0	1	2	3	4
5. Having to repeat the same actions such as touching, counting, washing	0	1	2	3	4
5. Sleep that is restless or disturbed	0	1	2	3	4
7. Having urges to break or smash things	0	1	2	3	4
3. Having ideas or beliefs that others do not share	0	1	2	3	4
9. Feeling very self-conscious with others	0	1	2	3	4
0. Feeling uneasy in crowds, such as shopping or at a movie	0	1	2	3	4
1. Feeling everything is an effort	0	1	2	3	4

	Not at All	A Little Bit	Moderately	Quite a Bit	Extremely
'2. Spells of terror or panic	0	1	2	3	4
'3. Feeling uncomfortable about eating or drinking in public	0	1	2	3	4
'4. Getting into frequent arguments	0	1	2	3	4
5. Feeling nervous when you are left alone	0	1	2	3	4
6. Others not giving you proper credit for your achievements	0	1	2	3	4
7. Feeling lonely even when you are with people	0	1	2	3	4
8. Feeling so restless you couldn't sit still	0	1	2	3	4
9. Feelings of worthlessness	0	1	2	3	4
0. Feeling that familiar things are strange or unreal	0	1	2	3	4
1. Shouting or throwing things	0	1	2	3	4
2. Feeling afraid you will faint in public	0	1	2	3	4
3. Feeling that people will take advantage of you if you let them	0	1	2	3	4
4. Having thoughts about sex that bother you a lot	0	1	2	3	4
5. The idea that you should be punished for your sins	0	1	2	3	4
6. Feeling pushed to get things done	0	1	2	3	4
7. The idea that something serious is wrong with your body	0	1	2	3	4
8. Never feeling close to another person	0	1	2	3	4
9. Feelings of guilt	0	1	2	3	4
0. The idea that something is wrong with your mind	0	1	2	3	4

SCL-90 items that discriminate CR-PTSD positive and negative groups

Item #	Item
3.	Repeated unpleasant thoughts that won't leave your mind
12.	Pains in heart or chest
13.	Feeling afraid in open spaces or on streets
14.	Feeling low in energy or slowed down
17.	Trembling
18.	Felling that most people cannot be trusted
23.	Suddenly scared for no reason
24.	Temper outbursts that you could not control
28.	Feeling blocked in getting things done
38.	Having to do things very slowly to insure correctness
39.	Feeling inferior to others
44.	Trouble falling asleep
45.	Having to check and double-check what you do
51.	Your mind going blank
54.	Feeling hopeless about the future
56.	Feeling weak in parts of your body
59.	Thoughts of death or dying
66.	Sleep that is restless or disturbed
68.	Having ideas or beliefs that others do not share
70.	Feeling uneasy in crowds, such as shopping or at a movie
79.	Feelings of worthlessness
80.	The feeling that something bad is going to happen to you
81.	Shouting or throwing things

82. Feeling afraid you will faint in public

84. Having thoughts about sex that bother you a lot

86. Thoughts and images of a frightened nature

89. Feeling of guilt

APPENDIX G

IES

Below is a list of comments made by people about stressful life events and the context surrounding them. Select an event which has been most traumatic for you, for example, torture, injury during demonstrations, injury during raids, death of a loved one during torture,or demonstrations, and/or raids. Write the event in the space provided below. Read each item and decide how frequently each item was true for you during the past seven (7) days, for the traumatic event you have experienced. If the item did not occur during the past seven days, choose the "Not at all" option. Indicate on the line at the left of each comment the number that best describes that item. Please complete each item.

1 = Not at all
2 = Rarely
3 = Sometimes
4 = Often

Event _____

_____ 1. I thought about it when I didn't mean to.
_____ 2. I avoided letting myself get upset when I thought about it or was reminded of it.
_____ 3. I tried to remove it from memory.
_____ 4. I had trouble falling asleep or staying asleep, because of pictures or thoughts that came into mind.
_____ 5. I had waves of strong feelings about it.
_____ 6. I had dreams about it.
_____ 7. I stayed away from reminders of it.
_____ 8. I felt as if it hadn't happened or wasn't real.
_____ 9. I tried not to talk about it.
_____ 10. Pictures about it popped into my mind.
_____ 11. Other things kept making me think about it.
_____ 12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.
_____ 13. I tried not to think about it.
_____ 14. Any reminder brought back feelings about it.
_____ 15. My feelings about it were kind of numb.

APPENDIX H

Mean Interim Correlations and Coefficient Alpha for the EPQ-R Scales on Raw, Conceptual Triads, Empirical Triads and Random Triads

	Scale			
	P	E	N	L
M	8.06	12.89	13.31	11.91
SD	3.69	4.10	4.62	3.89
Raw Items				
N	32	23	24	21
Mr	0.058	0.103	0.127	0.109
alpha	0.633	0.719	0.784	0.717
Conceptual Parcels				
N	11	7	8	7
Mr	0.125	0.202	0.279	0.234
alpha	0.602	0.667	0.754	0.681
Empirical Parcels				
N	11	8	8	7
Mr	0.108	0.194	0.240	0.218
alpha	0.556	0.652	0.722	0.666
Random Parcels				
N	11	8	8	7
Mr	0.148	0.250	0.308	0.261
alpha	0.678	0.727	0.780	0.712

LISREL Estimates (Maximum Likelihood)

Parcels:	Conceptual				Empirical				Random			
Scale:	P	E	N	L	P	E	N	L	P	E	N	L
P1	0.632	0	0	0	0.487	0	0	0	0.519	0	0	0
P2	0.483	0	0	0	0.482	0	0	0	0.472	0	0	0
P3	0.476	0	0	0	0.418	0	0	0	0.417	0	0	0
P4	0.416	0	0	0	0.407	0	0	0	0.395	0	0	0
P5	0.330	0	0	0	0.366	0	0	0	0.382	0	0	0
P6	0.311	0	0	0	0.352	0	0	0	0.380	0	0	0
P7	0 282	0	0	0	0.332	0	0	0	0.362	0	0	0
P8	0.265	0	0	0	0.251	0	0	0	0.346	0	0	0
P9	0.246	0	0	0	0.193	0	0	0	0.312	0	0	0
P10	0.188	0	0	0	0.192	0	0	0	0.226	0	0	0
P11	0.110	0	0	0	0.052	0	0	0	0.216	0	0	0
E1	0	0.630	0	0	0	0.537	0	0	0	0.678	0	0
E2	0	0.591	0	0	0	0.521	0	0	0	0.647	0	0
E3	0	0.495	0	0	0	0.495	0	0	0	0.518	0	0
E4	0	0.448	0	0	0	0.494	0	0	0	0.485	0	0
E5	0	0.445	0	0	0	0.466	0	0	0	0.427	0	0
E6	0	0.401	0	0	0	0.424	0	0	0	0.424	0	0
E7	0	0.235	0	0	0	0.316	0	0	0	0.413	0	0
E8	-	-	-	-	0	0.288	0	0	0	0.398	0	0

PARCELS:	Conceptual				Empirical				Random			
Scale:	P	E	N	L	P	E	N	L	P	E	N	L
N1	0	0	0.608	0	0	0	0.643	0	0	0	0.590	0
N2	0	0	0.600	0	0	0	0.634	0	0	0	0.583	0
N3	0	0	0.597	0	0	0	0.605	0	0	0	0.579	0
N4	0	0	0.548	0	0	0	0.499	0	0	0	0.578	0
N5	0	0	0.536	0	0	0	0.471	0	0	0	0.556	0
N6	0	0	0.512	0	0	0	0.418	0	0	0	0.548	0
N7	0	0	0.452	0	0	0	0.333	0	0	0	0.525	0
N8	0	0	0.358	0	0	0	0.293	0	0	0	0.483	0
L1	0	0	0	0.614	0	0	0	0.786	0	0	0	0.700
L2	0	0	0	0.578	0	0	0	0.550	0	0	0	0.576
L3	0	0	0	0.552	0	0	0	0.537	0	0	0	0.549
L4	0	0	0	0.528	0	0	0	0.399	0	0	0	0.520
L5	0	0	0	0.467	0	0	0	0.385	0	0	0	0.461
L6	0	0	0	0.426	0	0	0	0.356	0	0	0	0.424
L7	0	0	0	0.220	0	0	0	0.243	0	0	0	0.347

Factor intercorrelations

Conceptual			Empirical			Random		
	P	E	N	P	E	N	P	E	N
P	1.00			1.00			1.00		
E	-0.06	1.00		-0.08	1.00		-0.01	1.00	
N	0.41	-0.09	1.00	0.44	-0.07	1.00	0.28	-0.01	1.00
L	-.062	-0.24	-0.42	-0.70	-0.26	-0.35	-0.58	-0.21	-0.35

Measures of Goodness of Fit Whole Models

Conceptual	Empirical	Random
(489) = 735.66	(521) = 731.34	(521) = 725.55
/d.f. = 1.504	/d.f. = 1.404	/d.f. = 1.393
GFI = 0.818	GFI = 0.796	GFI = 0.829
AGFI = 0.081	AGFI = 0.796	AGFI = 0.804
RMSR = 0.081	RMSR = 0.079	RMSR = 0.074