THE EFFICACY OF CREATIVE THERAPEUTIC TECHNIQUES IN ASSISTING "COLOURED" ADOLESCENTS TO COPE WITH THE STRESSES OF DAILY LIVING

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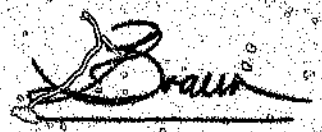
DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Arts in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



L.S. Braun

27th day of February, 1992.

DEDICATION

To David, whose love and unfaltering belief in me and the present research sustained me throughout the conducting of this study.

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ABSTRACT

The adverse effects of the current turbulent social and political situation in South Africa upon the mental health of socio-politically disadvantaged youth has emerged as a central area of concern amongst mental health professionals. The ability of the vast number of disadvantaged youths to cope with the stresses that confront them on a daily basis, has profound consequences for the South Africa of the future. The present study was prompted by the lack of any comprehensive and accessible intervention programme for children under stress in this country, as well as by the dearth of applied stress research into so-called "normal" Apartheid-related conditions. The primary aim of the present study was to investigate the efficacy of a psychologically-based intervention programme in assisting so-called "Coloured" adolescents to cope with the stresses in their daily lives. The secondary aim of the investigation was to describe the environment of these adolescents, as seen through their eyes. Twenty-four "Coloured" adolescents were drawn from Coronationville Secondary School in Coronationville. The sample was equalised for age, sex and standard. Subjects were randomly selected and then randomly assigned to either an experimental or control group. In order to evaluate the presence of psychological sequelae of stress in the sample, all subjects were pre-tested on the following measures: The Beck Depression Inventory (BDI), The State-Trait-Anxiety Inventory (STAI), and the Self-Perception Profile for Children (SPPC). In addition, all subjects completed an essay and drawing task in order to gain insight into their perceptions of their environment. Over a five week period, the experimental group received ten sessions of therapeutic intervention. The intervention was peer-group orientated and integrated a variety of well established affective, cognitive, and behavioral techniques. The input received by the control group over this same period was orientated to the school syllabus. Following intervention, both groups were re-administered the BDI, STAI and SPPC. The results of the present investigation suggest that "Coloured" adolescents are confronted with numerous daily stresses and perceive their environment to be a violent and frightening one. In addition, the findings indicate that a group orientated intervention programme that uses creative mediums to integrate affective, cognitive, and behavioral techniques within the context of peer-group support, is effective in assisting disadvantaged "Coloured" adolescents to cope with the stresses inherent in their daily lives. The importance of conducting further research into the efficacy of the intervention programme implemented in this study was underscored.

LIST OF ABBREVIATIONS

ANOVA = Analysis of Variance

BDI = Beck Depression Inventory

df = Degrees of Freedom

Exp. = Experimental

F = F test statistic ratio as used in Analysis of Variance

MS = Mean Square

N = Sample Size

p = Probability of the result under the Null Hypothesis

SD = Standard Deviation

STAI = State-Trait Anxiety Inventory

SPPC = Self-Perception Profile for Children

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CHAPTER 1: INTRODUCTION

1.1 Rationale for the Study

Increasing tensions and growing social upheaval characterize the current situation in South Africa. On a daily basis, people have to cope with the multifarious stresses of living in a country assailed by severe economic crisis and politically determined violence. In addition, the majority of South Africans have to tolerate the chronic stress of living under an oppressive social system in which discrimination, poverty, poor education and unemployment are entrenched.

The adverse impact of the present situation in South Africa upon the emotional well-being of most South Africans has been widely noted (Dawes, 1985; Hayes, 1986; Vogelman, 1986). In particular, the mental health of socio-politically disadvantaged youths has emerged as a central area of concern amongst members of the helping professions (Burman and Reynolds, 1986; Gibson, 1986, 1990; Tyrton, Straker, and Moosa, 1991). Because of their disadvantage these children are exposed to great stresses in their daily lives. Children may be considered to be society's most valuable resource; they unavoidably have a profound effect upon social policy, way of life, the economy, and attitudinal developments (Burman, 1986). A pressing need exists for research to be conducted on children in South Africa (Burman and Reynolds, 1986). In the words of former ANC president Oliver Tambo (1990):

> **"The children of any nation are its future. A country, a movement, a people that does not value its youth does not deserve its future" (p.6).**

South Africa has a large population of disadvantaged youths who have to negotiate acute and chronic stressors on a daily basis. Traditionally, research in the stress literature has focused upon major undesirable or traumatic life events and their consequences (Compas, 1987a, 1987b; Dohrenwend and Dohrenwend, 1974; Holmes and Rahe, 1967). However, the focus has shifted. Recent research indicates that frequent daily stresses have a more profound effect upon physical and mental health than do major undesirable events (Kanner, Coyne, Schaefer and Lazarus, 1981; Lazarus, 1981). In addition, research has

shown that chronic stressors in the environment may deplete coping reserves and lead to heightened difficulty in dealing with major undesirable life events (Pearlin, 1982; Daniels and Moos, 1990). It follows that the ability to cope effectively with daily stress plays a major role in determining one's health and emotional well-being (Matheny, Aycock, Pugh, Curlette, and Cannella, 1986).

A growing body of literature is emerging on the nature and scope of the oppression of children and their families under Apartheid (Burman and Reynolds, 1986; Narunsky, 1986; Floyd, 1986; Straker, Moosa and Sanctuaries Counselling Team, 1988; Turton, Straker and Moosa, 1991; Gibson, 1986, 1989; Newcombe, 1990; Lab, 1987). With small exception (e.g. Turton, 1986) this emergent body of applied stress research has focused upon the effects on children of overt political violence; little attention has been paid to "normal" levels of violence. There is also a dearth of research which examines the consequences of "normal" apartheid-related conditions in community settings (Turton, Straker and Moosa, 1991). It is posited that an investigation into the "normal" daily stresses experienced by disadvantaged South African youth would greatly contribute to an understanding of the impact of these stresses upon them.

It is documented in the literature that adolescence is a particulary stressful stage in the normal developmental sequence of the individual (Hains and Szyjakowski, 1990). When additional stress overlays the developmental crisis of adolescence, the risk of developing psychological sequelae increases (Wills and Lagner, 1981; Gad and Johnson, 1980). Given that being socio-politically disadvantaged brings with it numerous stressors, socio-politically disadvantaged adolescents may be seen to be at risk for developing a wide range of psychological problems.

A survey of the literature reveals that Black children have been the focus of applied stress research in this country. Scant attention has been paid to issues relating to the experiences of children from other minority race groups. In the present study, attention will be focused upon children from the so-called "Coloured" community. (For the purposes of this dissertation the term "Coloured" will be used for the sake of simplicity, despite its negative racial implications). These children have not escaped the multiple adverse effects of the policy of

Apartheid. The Coloured people of South Africa have been marginalised socially, economically and politically for many years. Their experience is described in the following words: "... we are the nowhere people at the southern tip of Africa" (Venter, 1974, p.6).

Referred to sympathetically as "God's step-children" (Sunday Star Review, 1991), a large proportion of Coloured youth come from a background characterised by social, political, and economic discrimination; poverty; overcrowding; unemployment; financial difficulties; alcoholism; violence; poor schooling; and broken homes (Rhoodie, 1977; Venter, 1974). These chronic factors, which frequently occur in low socio-economic status populations, are considered in the literature to be factors that lead both to physical and psychological stress (Dohrenwend, 1990; Gad and Johnson, 1980; Turton, 1986; Wills and Lagner, 1981). It has been asserted that chronic life conditions can be even more potent stressors than acute events or crises (Brown, Bhrolchain and Harris, 1975). Wilson (1989, cited in Newcombe, 1990) contends that stressors associated with unemployment and financial hardship generally impact more strongly on the population than does political violence. It is postulated by Richman (1986) that racial discrimination has a cumulative effect in the medium or long term that is as severe as instances of acute, catastrophic stress. Conducting research amongst parasuicidal South African Indian adolescents, Pillay and Schlebusch (1987) and Wood and Wassenaar (1989) found that family stresses resulting from socio-cultural transition were important causal considerations in the aetiology of this behaviour. The Coloured population in South Africa may also be seen to be in the throes of socio-cultural transition. The need for research into the Coloured community is evident.

The intensifying need for psychological intervention among socio-politically disadvantaged adolescents in South Africa is matched by an increasing discrepancy between the number of individuals in need of help, and the number of persons qualified to provide the requisite help (Straker, 1986). Psychological services and practise have been forcibly criticised as being insufficient, inaccessible and unable to meet the mental health needs of the majority of South Africans (Dawes, 1985; Vogelman, 1987). There is a pressing need to reach large numbers of individuals with effective techniques that require fewer professional personnel (Freeman, 1991). To date, no comprehensive stress prevention or intervention programmes have been developed or implemented with children and/or adolescents in South Africa. The present study will attempt, in some measure, to address this need.

Psychological interventions that are designed to reduce the physical and mental health costs of stress by facilitating effective coping have stimulated worldwide scientific and popular interest (Holroyd and Lazarus, 1982). A growing body of research indicates that cognitive-behavioral interventions may be promising in the prevention and treatment of stress-related disorders (Dobson, 1988; Meichenbaum and Jaremko, 1983). Further, recent research indicates that a treatment approach that focuses on assisting individuals to cope effectively with frequent daily stresses could contribute significantly to the alleviation of stress-related problems (Tolman and Rose, 1985). Coping and adaptational skills are developing rapidly during the early years of one's development. Childhood and adolescence have, therefore, been isolated as critical periods for implementing intervention programmes designed to enhance coping skills and reduce the negative effects of stressful events (Compas, 1987a, 1987b; Romano, 1988).

It is proposed that "Community Oriented Preparation for Emergency" (COPE, Ayalon, 1987), a large-scale preventive-intervention programme developed in Israel, offers important possibilities for children under extreme stress in this country. Designed to assist children and adolescents in coping with the stressful events of everyday life, as well as with emergencies caused by the disruption of social equilibrium and security, the COPE programme may be seen to be particulary relevant to the situation confronting the greater majority of the youth in our country. The fundamental aim of the programme is to encourage mastery through active coping that might contribute to a clearer evaluation of stressful situations, tapping the youths potential adaptive resources (Ayalon, 1983). The programme employs expressive, cognitive and behavioral methods in a creative manner in order to achieve its goals. It is proposed that a therapeutic intervention based upon aspects of the COPE programme may serve to provide disadvantaged youth with various tools which will render them less vulnerable and more resilient to stressful situations. COPE has been implemented in schools throughout Israel and has assumed particular importance in those areas constantly under the threat of terrorist attacks. Feedback on COPE's effectiveness has been positive. It has been shown that the programme serves to reduce the symptoms of stress (Ayalon, 1987; Lahad and Cohen, 1981; Lahad, 1989). However, its effectiveness has yet to be scientifically investigated by means of carefully controlled studies.

1.2 Aims and Hypotheses

The present investigation has two aims. The primary aim is to investigate the efficacy of a psychologically based intervention programme in assisting a group of Coloured adolescents to cope with the stresses of daily living. The principles and ideas outlined in **COPE** will form the basis of the intervention programme. The stress response involves psychological, behavioral and physiological symptoms (Matheny, Aycock, Pugh, Curlette, and Cannella, 1986). In the present study it is the psychological sequelae of stress that are of primary concern. In order to evaluate the intervention, its efficacy in significantly ameliorating certain psychological sequelae of stress will be examined. In the literature depression, anxiety, and feelings of low self-worth have been documented as psychological sequelae of stress among adolescent populations (Daniels and Moos, 1990; Siddique and D'Arcy, 1984; Youngs, Rathge, Mullis and Mullis, 1990). In addition, these sequelae have been documented in low socio-economic status populations (Dohrenwend, 1973; Masterpasqua, 1989). The efficacy of the intervention programme will be assessed by examining the degree to which these sequelae are present in the sample following intervention. A secondary aim of the study is to describe the daily stresses experienced by Coloured adolescents, as seen through their eyes.

Having presented the rationale and aims of the study, the specific findings anticipated need to be outlined. Based upon stress and coping research, three hypotheses have been formulated:

Hypothesis 1:

Following intervention, the post-test level of depression in the experimental group, as measured by the "Beck Depression Inventory" (Beck *et al.*, 1961), will be lower than that in the control group.

Hypothesis 2a):

Following intervention, the post-test level of "State-Anxiety" in the experimental group, as measured by the "State-Trait Anxiety Inventory" (Spielberger *et al.*, 1983), will be lower than that in the control group.

Hypothesis 2b):

Following intervention, the post-test level of "Trait-Anxiety" in the experimental group, as measured by the "State-Trait Anxiety Inventory" (Spielberger *et al.*, 1983), will be lower than that in the control group.

Hypothesis 3:

Following intervention the levels of adequacy in all domains in the experimental group, as measured by the "Self-Perception Profile for Children" (Harter, 1985), will be higher than that in the control group. More specifically, the experimental group will show higher levels of adequacy than the control group in the following domains:

a) Scholastic Competence
b) Social Acceptance
c) Athletic Competence
d) Physical Appearance
e) Behavioral Conduct and
f) Global Self-Worth.

In focusing upon the effectiveness of a psychologically based intervention programme, and in documenting the daily stresses that face Coloured adolescents as a result of Apartheid-related conditions, this dissertation hopes to fill, in some measure, the lacunae in current applied stress research in South Africa.

CHAPTER 2:
STRESS AND COPING: CLARIFICATION OF TERMS

The concepts of "stress" and "coping" have given rise to much controversy in the literature. These concepts are central to the present study and will be examined in detail below.

2.1 The Concept of Stress

Burgeoning popular and scientific interest in the concept of stress has given rise to a vast and diverse body of literature. Stress has been conceptualised from various points of view; anthropological, cultural, ethological, biological, and psychological perspectives have all been represented in the literature. In addition, individuals within disciplines have conceptualised stress differently, studied various phenomena, employed disparate methodologies, and made different assumptions (Cameron and Meichenbaum, 1982). Serious dispute and unresolved debate abounds in the literature over the definition and nature of stress (Cox, 1978; Lazarus, 1966; McGrath, 1970; Mason, 1975). According to Mason (1975):

> **"The general picture in the field can still only be described as one of confusion...[the] term 'stress' has been used variously to refer to 'stimulus'..., 'response'..., 'interaction'...and more comprehensive combinations of these factors" (p.29).**

Certain writers have suggested abandoning the use of the term altogether (Mason, 1975; Ostell, 1988), while others have argued convincingly for its retention (Pearlin, 1982; Garmezy, 1988; Pretzer, Beck and Newman, 1989). It has been suggested that the core meaning of the concept is not confusing, as there is widespread agreement that "stress" refers to the organism's response to a noxious or threatening condition (Pearlin, Lieberman, Menaghan and Mullan, 1981). It is noted by Pearlin (1982) that dispute arises with regard to where and how to identify such a response. In his view:

> **"...Manifestations of stress are found at every level of organismic functioning, from the biological to the emotional; stress can be both a short-run response**

and a pattern that emerges slowly over time; individuals may be keenly aware that they are host to stress, although stress may also be present at a level below consciousness ; finally, stress responses can be highly contained and situationally bounded, but they can also develop into a prevailing state that persists through time...It is in the very nature of stress that it can be so many things, and we should not try to reduce the multidimensionality of this phenomenon by arbitrarily declaring that stress is only one thing or another... My own conviction is that it is prudent to retain the concept of stress despite its problems and shortcomings" (p.369).

It is clearly impossible to formulate a single definition of stress that would be acceptable to all the perspectives in the field. Any definition must needs reflect the interests, methodologies and subject matter of the disciplines which attempt to study it (Dobson, 1982). In an effort to achieve some understanding of the concept of stress, the central conceptual models which have been formulated by researchers in the field will be surveyed. These models have arisen out of the differing foci of stress research. Stress has been variously conceptualised as a stimulus, a response and a transaction. These models will each be examined in turn.

Stimulus models (e.g. Holmes and Rahe, 1967) underscore the precipitating role of environmental factors, such as life events, in the stress phenomenon. Impending medical surgery, isolation situations, exposure to urban stress, and impending or recent disasters are commonly referred to as stress situations (Chalmers, 1981). Such models postulate that stress, in the form of clustering life events, leads to stress symptoms. The Schedule of Recent Experience (SRE), developed by Holmes and Rahe (1967), is frequently used to measure the number of major life events to which a person has been subjected over a specified period of time.

A difficulty associated with this approach is that individual differences which exist in response to the same stress situation are not acknowledged. The subjective evaluation of the event by the subject is not taken into account (Vingerhoets and Marcelissen, 1988). In addition, such an approach requires a means for calibrating the properties of the stress

situation in order to quantify the degree of stress of different situations (Chalmers, 1981). Ever since the seminal work of Holmes and Rahe (1967), much research effort has been expended in attempting to develop this approach to a more valid and methodologically more sound one. Even so, opponents and proponents strongly disagree on the value of this line of research. Critics disapprove of its theoretical foundations. They also disapprove of the way in which both relevant variables (that is, life events on the one hand and the different indices of mental and/or physical health on the other) are operationalized (Vingerhoets and Marcelissen, 1988).

Response models (e.g. Seyle, 1974; Wolff, 1968) view stress as a physiological response to demands made upon the organism. Seyle (1974), whose work is typical of this approach to stress, asserts that stress is the non-specific response of the body to any demand placed upon it. According to his work, stress comprises a predictable set of hormonal and neurological reactions to stimuli that disrupt homeostasis. These physiological responses are deemed to be adaptive because they prepare the individual to cope with impending danger. Seyle proposed that these reactions follow a three-stage General Adaptation Syndrome (GAS), including alarm, resistance, and exhaustion stages. This process was termed non-specific in that the body shows the same effects irrespective of the source of stress.

This approach to stress has been criticised on the grounds that certain noxious physical conditions do not produce the GAS (Mason, 1975). A further criticism is that it disregards the role of psychological factors in stress. The psychological impact of a stressor on a person is said to determine much of the physiological GAS response (Vingerhoets and Marcelissen, 1988; Cox, 1978). In addition, this model has been faulted for failing to emphasize the central role of cognition in determining arousal (Lazarus, 1966).

Given the aforementioned limitations, the need for a broad, integrative framework within the complex area of stress has been highlighted (Matheny *et al.*, 1986; Witmer, 1986). A **transactional model** of stress (McGrath, 1970; Cox, 1978; Lazarus, 1966; Lazarus and Folkman, 1987) has emerged to meet this need and is currently considered to be the most widely accepted approach to the study of stress (Chalmers, 1981; Meichenbaum and Cameron, 1983). According to this model, stress is the result of an imbalance between

perceived demand in the environment and perceived capabilities of the individual to meet that demand (Lazarus and Folkman, 1987).

Lazarus (1966) and his colleagues may be considered to be the most important advocates of the transactional approach to stress (Vingerhoets and Marcelissen, 1988). Their model, which explains both stress and coping, is the conceptual framework adopted for the purposes of this study. It will be examined in detail in the following chapter of the present study.

2.2 The Concept of Coping

The last two decades have witnessed an important change in perspective in the health field. It has been increasingly acknowledged that adaptational outcomes are not simply a consequence of the presence or absence of stress. Rather, the construct labelled "coping" has been identified as the major factor that mediates the relationship between stress and mental or physical disorder (Lazarus and Folkman, 1987; Holroyd and Lazarus, 1982).

Although a significant relationship between stress and illness has been reported in numerous studies (Johnson and Sarason, 1978; Billings and Moos, 1982; Folkman and Lazarus, 1986), the predictive ability of stress on future disorder has generally been quite modest. The hypothesis that coping constitutes a mediator variable between stress and disorder is attractive. It potentially explains the persistent, low magnitude of association between stress and disorder. It is postulated that, given the same degree of stress, individuals who use more effective coping strategies will experience less disrupted behaviour and therefore will experience less distress (Billings and Moos, 1982).

The concept of coping has received considerable attention in the psychological literature and is no less a controversial and ambiguous concept than its companion construct of stress (Pearlin and Schooler, 1978; Billings and Moos, 1981; Folkman and Lazarus, 1980). Discomfort with the imprecision of definition abounds. In addition, criticism has been

levelled at the lack of systematic categorization of coping methods, and the trend towards over-inclusiveness in which all responses to a stressful event are defined as coping responses (Garmezy and Rutter, 1988; Matheny *et al.*, 1986; Monat and Lazarus, 1977).

Although broadly defined as the things that people do to avoid or lessen the impact of harmful life strains, coping has acquired a multiplicity of conceptual meanings over the years (Pearlin and Schooler, 1978). It is necessary to adopt a definition of coping for the purposes of the present study. Three central models of coping may be identified: the animal model, the ego psychology model and the process-oriented model (Lazarus and Folkman, 1987). These major approaches to coping will be reviewed.

The **animal model** perceives coping to be made up of behavioral responses (mainly escape and avoidance) that control aversive environmental conditions, thereby lowering arousal or drive. This approach does not include cognitive coping or ego defenses within its scope (e.g. Levine and Ursin, 1980).

The **ego psychology** model, in contrast to the animal or behaviourist approach, underscores the ego processes involved in adaptational decisions. In addition, it emphasizes the actions employed to manage impulses and to deal with the environment. Within this model, the quality of these coping processes is evaluated along a continuum from pathological to healthy. Placement along the continuum is dependent upon the extent to which a coping process conforms to reality. The flexibility and rigidity of the coping process are also taken into account. Within the context of this model, denial and intellectualisation are considered to be neurotic forms of coping, while suppression and humour are deemed to be healthy and mature ways of coping (Menninger, 1954; Haan, 1982). The ego psychology model has been criticised for giving rise to static coping measures based on trait or style concepts (Folkman and Lazarus, 1980).

The behaviourist and ego psychology models constituted the two basic models of coping until the late 1970's when coping first began to be conceptualised as a process, with emphasis being placed upon contextual and temporal factors (e.g., Pearlin and Schooler, 1978;

Folkman and Lazarus, 1980; Billings and Moos, 1981). This process-orientated approach is seen to offer advantages over the conceptualisation of coping as a static trait or style and to do more justice to the complexity and multi-dimensionality of the concept (Lazarus and Folkman, 1987; Punamaki and Suleiman, 1990).

The concept of coping forms an integral part of Lazarus and Folkman's (1987) transactional model of stress. Their transactional model of stress has been adopted as the conceptual framework for this study. It follows that their process-orientated conceptualisation of coping, which is integrated into their model of stress, is similarly adopted.

In the present chapter, the central concepts of stress and coping were clarified and a transactional model of stress and coping was isolated as the conceptual model of choice for the present investigation. This model will be examined in detail in the chapter that follows.

CHAPTER 3:
ADOPTING A CONCEPTUAL MODEL OF STRESS AND COPING

The transactional model of stress and coping developed by Lazarus and his colleagues (Holroyd and Lazarus, 1982; Lazarus, 1966; Lazarus and Folkman, 1984, 1987; Lazarus and Opton, 1966) has been adopted as the conceptual model for the purposes of the present study. This model will be examined in detail below.

3.1 Stress

According to Holroyd and Lazarus (1982), "stress":

> **"...requires a judgement that environmental and/or internal demands tax or exceed the individual's resources for managing them " (p.21).**

From this perspective stress is neither a quality inherent in what might be called "demanding" situations, nor a specific psychological or physiological response syndrome to demanding situations. It is viewed as a relational concept, reflecting the relationship between a person and a situation when the person transacts with that situation in certain ways (Ostell, 1988).

In their more recent work, Lazarus and Folkman (1987) have moved away from speaking of stress toward speaking of emotion. They assert that stress does not only concern negative person-environment relationships, cognitive appraisals and emotional responses. They propose that stress in fact falls under the larger rubric of emotion which includes (in addition to the above) positive relationships, appraisals, and emotions.

Lazarus and his colleagues adopt a systems approach in their study of emotion or stress. Their explanation for adopting such an approach is as follows:

"We are forced logically to systems analysis once we accept that emotion cannot adequately be defined externally in terms of environmental stimuli or as a response to such stimuli, or internally as impulse or conflict between impulses, and further that the quality and intensity of an emotion depends on a variety of mediating variables and processes."(Lazarus and Folkman, 1987, p.143).

System variables for the emotion process are illustrated in Table 3.1 below.

Table 3.1

Illustrative System Variables for the Emotion Process (Taken from Lazarus and Folkman, 1987, p.144)

Causal antecedents →	Mediating processes →	Immediate effects →	Long-term effects
Person variables:	**Encounter 1...2...3...n**		
Values, commitments, and goals General beliefs, e.g., Self-esteem Mastery Sense of control Interpersonal trust Existential beliefs	**Within an encounter time 1...2...3...n** Primary appraisal (stakes) Secondary appraisal (coping options)	Affect Physiological changes	Psychological well-being Somatic health/ illness
Environmental variables: Demands Resources, e.g. social support network Constraints Temporal aspects	Coping (including use of social support): Problem-focused forms Emotion-focused forms	Quality of encounter outcome	Social functioning

Note. Although not shown here, the model is recursive. Also, note parallelism between short- and long-term effects.

In this systems table, causal antecedents are divided into person antecedents and environmental antecedents. Person antecedents include goal hierarchies and belief systems, while

environmental antecedents include demands, resources, constraints and temporal aspects. **Primary and secondary appraisal constitute mediating processes.** In relation to secondary appraisal, **problem-focused and emotion-focused coping** constitute broad categories of coping options. The system includes short-term outcomes or **immediate effects**, which include emotions during and following an encounter. **Long-term effects** include psychological well-being, somatic health or illness and social functioning. Although not indicated in the diagram, the model is recursive (Lazarus and Folkman, 1987).

The concepts of **cognitive appraisal** and **coping responses** are central to the transactional model. Individuals are seen to actively define and shape stressful transactions by means of their cognitive appraisal and coping responses (Ostell, 1988).

According to Lazarus and Folkman (1987), individuals evaluate what is happening to them in an ongoing way from the standpoint of its importance to their well-being. They term this behaviour **appraisal** and assert that whether and how one copes with demands depends upon this appraisal. The qualities and intensities of the emotions one experiences are similarly dependent upon such appraisal. In every encounter, appraisal is influenced by person and environmental variab . Two kinds of appraisal are distinguished, namely; **primary and secondary.**

Primary appraisal refers to a cognitive process which concerns itself with the issue of whether something germane to ones well-being is involved. Three types of primary appraisals are identified: harm, threat and challenge. Harm refers to harm already experienced, threat is anticipated harm, while challenge represents the potential for mastery or gain (Lazarus, 1966). An additional appraisal has been added to these standard appraisals; that of benefit (Lazarus and Folkman, 1987).

It should be noted that individuals bring social and cultural environmental conditions, as well as psychological characteristics, to encounters. An environmental condition will only be a source of harm or benefit if it confronts individuals or groups having goals or beliefs, for example, that render them vulnerable to that particular condition. Similarly, an indi-

vidual or group characteristic will only be a source of harm or benefit if that characteristic, for example a goal, is confronted with a relevant environment condition which prevents the realisation of this goal. Certain attributes are shared by all individuals, making them more or less vulnerable to environmental conditions; such as, disasters or a threat to the well-being of a loved one. However, the quality and intensity of the emotional reaction to these conditions varies from person to person due to personality factors and coping tendencies (Lazarus and Folkman, 1987).

Primary appraisal constitutes the individual's decision as to whether s/he has any stakes in the encounter. In the event of no stake existing, the encounter is seen to have no bearing on well-being and hence no emotional reaction will occur. If, however, the encounter is relevant to well-being, the quality and intensity of the emotion will vary according to what and how much is at stake.

In the event of there being stakes in an encounter, evaluative judgements need to be made about whether any steps can be taken to improve the disturbed person-environment relationship. The cognitive process is now concerned with which coping options might work. This process, termed **secondary appraisal**, constitutes an essential supplement to primary appraisal. Harm, threat, challenge and benefit are dependant upon how much control the individual believes can be exercised over outcomes. This evaluation of coping options and constraints is influenced by previous experiences of a similar nature, generalized beliefs about the self and the environment, and the availability of personal and environmental resources (Holroyd and Lazarus, 1982).

Central to Lazarus and Folkmans' (1987) theory is the assumption that **primary** and **secondary appraisal**, as mediators of the emotional reaction, influence each other but have no necessary temporal ordering. The distinction is valuable in drawing attention to different sets of variables that interact in determining stress responses, coping patterns and adaptational outcomes (Holroyd and Lazarus, 1982).

A stressful transaction develops with a primary appraisal that an effective response is required in order to avoid or reduce physical or psychological harm, and a secondary appraisal that an adequate response is not available. Under these circumstances, the individual either makes an attempt at a response or fails to respond. The presence of a response, or its absence, has environmental repercussions and changes the situation. There is thus an ongoing series of appraisals, responses and situational transformations (Meichenbaum and Cameron, 1983). The appraisal process is not necessarily rational and may not reflect extensive information processing, particulary in instances when threat is great or personal agendas and commitments are activated (Holroyd and Lazarus, 1982). This brings us to a discussion of coping.

3.2 Coping

According to Lazarus and Folkman (1987) "coping", which can be anticipatory or consequent upon an event, refers to:

> **"the person's cognitive and behavioral efforts to manage (reduce, minimize, master or tolerate) the internal and external demands of the person-environment transaction that are appraised as taxing or exceeding the person's resources" (p.17).**

In the definition, the reference to "efforts to manage" indicates an emphasis on the dynamic constellation of thoughts and acts that constitute the coping process. This conceptualisation of coping contrasts with the more dominant approach to understanding individual differences in response to stress. This approach is primarily concerned with relatively static "moderator variables"; such as, personality traits, motive patterns, and historical events in the individual's life (Holroyd and Lazarus, 1982).

Lazarus and Folkman (1987) offer a critique of the moderator variable approach. They assert that moderator variables are generally only weakly related to actual coping activity and are, therefore, likely to be only weakly related to adaptational outcomes that are shaped

by the coping process itself. In addition, assuming that moderator variables predicted individual differences in response to stress successfully, an ignorance of mediational processes (that is, what is being done in what types of situations that significantly affects outcome) would remain.

Because of its breadth, Lazarus and Folkman's definition of coping has been criticized for its tendency towards overinclusiveness (Rutter, 1988). While acknowledging this problem, Holroyd and Lazarus (1982) assert that it is preferable to the difficulties that arise when attention is restricted to intrapsychic defensive processes while rational problem-solving efforts are ignored. They are similarly against attention being exclusively focused upon rational problem-solving efforts to the exclusion of the adaptive function of defensive processes, such as denial.

According to Folkman and Lazarus (1980), coping has two major functions: One directed at altering the troubled person-environment relationship (problem-focused coping) and the other directed at regulating emotional distress (emotion-focused coping). Their investigations have shown that people use both forms of coping in virtually every type of stressful encounter. Their findings highlight the inadequacy of simpler conceptualisations of coping.

Several forms of problem- and emotion-focused coping have been identified (Folkman and Lazarus, 1985). Problem-focused forms of coping include: aggressive interpersonal efforts to alter the situation, as well as cool, rational, deliberate efforts to problem solve. Emotion-focused forms of coping include: distancing, self-control, seeking social support, escape-avoidance, accepting responsibility, and positive reappraisal. In their more recent work, Lazarus and Folkman (1987) assert that although it is tempting to classify a given coping thought or action as either problem- or emotion-focused, in reality any coping thought or act can serve both functions.

It has consistently been shown that contextual factors are important in shaping the coping process (Folkman and Lazarus, 1985; Folkman *et al.*, 1986a, 1986b). Findings have shown that type of coping varies according to what is at stake (primary appraisal) and according to

what the coping options are (secondary appraisal). In a study conducted by Folkman *et al.* (1986a) the following findings were documented. When individuals felt that their self-esteem was at stake, they used more confrontative coping, self-control, escape avoidance and accepted more responsibility than when self-esteem was not at stake. When a goal at work was at stake, more planful problem-solving was used than in encounters that did not include this stake. Planful problem-solving and confrontive coping were used more in those encounters appraised as changeable, whereas distancing and escape-avoidance were used more in those encounters that are were not amenable to change. The findings also revealed that coping was related to the quality of encounter outcomes, but that appraisal was not. Confrontative coping and distancing were associated with those outcomes that the individual perceived to be unsatisfactory, while planful problem solving and positive reappraisal were associated with outcomes that were satisfactory.

In addition to contextual factors, temporal factors in the coping process have been explored (Folkman and Lazarus, 1985). It is asserted by Lazarus and Folkman (1987) that one of the tenets of a process-centred conceptualization is that as an encounter unfolds, so coping changes. These changes may be due to adventitious events in the environment or can result from problem-focused coping. Cognitive reappraisals or emotion-focused coping may also cause these changes. It must also be noted that coping changes across encounters. Coping is seen to influence an individual's emotional state from the beginning of an encounter to its end.

An issue that frequently emerges in the literature is whether some coping processes are more effective than others. Effective coping modes are those which safeguard healthy psychological functioning from the negative consequences of stress (Punamaki and Suleiman, 1990). Active efforts to relieve a stressful situation have been widely viewed as effective ways of coping, whereas passive and defensive coping has been considered to be ineffective (Ayalon, 1987; Gibbs, 1989; Monat and Lazarus, 1977).

Lazarus and Folkman (1987) argue that whether a given coping process has favourable or unfavourable results depends upon: 1) who uses it, 2) when it is used, 3) under which environmental and intrapsychic circumstances, and 4) with respect to which type of adaptational outcomes. According to Lazarus and Launier (1978), an adequate coping response in some instances may involve direct action to alter the situation for the better, to

escape from an intolerable situation, or to give up certain goals. They assert that such direct actions may prove helpful in situations where the stressor can be anticipated and action can be taken to prevent or lessen harm. In other instances, however, where stress cannot be altered or avoided, palliative modes of coping (i.e., ways of responding that help one feel better in the face of threat and harm without actually resolving the problem) may prove to be most helpful. Therefore, successful coping will not always involve active mastery over one's environment; in order to withstand life stresses an individual should be able to flexibly employ a number of coping strategies. This view is supported by several authors in the stress-coping field (Billings and Moos, 1981; Pearlin and Schooler, 1978; Rutter, 1988).

Finally, coping resources also need to be considered in the coping process. They affect both the range of coping options available to an individual and the predisposition to utilize available responses. Six categories of coping resources have been identified by Lazarus and his colleagues. Health and energy, morale, positive beliefs, skills, and system of beliefs constitute those resources which are internal to the person, while social support and material resources are environmentally based (Cameron and Meichenbaum, 1982).

3.3 Motivation for the Conceptual Model Adopted

A transactional model of stress-coping has been adopted for the purposes of this dissertation. This model has been adopted as it provides a conceptual link between stress research and contemporary cognitive-behavioral treatment strategies which are designed to promote realistic or adaptive appraisals of problems and effective coping responses (Cameron and Meichenbaum, 1982). A growing body of research suggests that cognitive-behavioral interventions may be a promising method of preventing and treating stress-related disorders (Meichenbaum and Jaremko, 1983). The intervention programme implemented in the present study, employs a variety of well established cognitive-behavioral treatment techniques. In addition, a transactional model is appealing in that it is consonant with viewing stress from a developmental perspective. Development is a complicated process which involves interactions within the individual and between the individual and the environment (Petersen and Spiga, 1982). In the following chapter, adolescence will be examined from a developmental perspective.

CHAPTER 4: ADOLESCENCE

Throughout life, developmental factors are central to the development of problems and psychopathology. Each particular phase of development creates stress and demands effective coping. Regressive or maladaptive ways of coping with contextual or maturational demands have profound consequences for future development. As a specific stage in the development of the individual, adolescence heralds numerous changes. These changes challenge the growing individual, both in central social contexts and in individual maturation (Petersen and Spiga, 1982; Petersen and Hamburg, 1986). An understanding of emotional issues and cognitive capacity during this period of development is crucial for the development of appropriate and effective interventions for adolescents (Kohen-Raz, 1988). For the purposes of the present study adolescence, as a developmental stage, will be examined.

4.1 Definition

Adolescence may be conceived of as an integral part of the developmental continuum extending from infancy to adulthood. It constitutes a typical human phenomenon created by the temporal gap between pubertal physiological maturation and the reaching of adulthood (Petersen and Hamburg, 1986).

According to Haim (1974), virtual unanimity exists concerning the onset of adolescence; that is, that it begins with the onset of puberty. The beginning of puberty is relatively fixed at 10-12 years for girls and 12-14 years for boys. However, the issue of marking the endpoint of adolescence is far more controversial. Whether it is environmentally determined by the recognition of adult status (as defined by institutionalised rules and norms) or determined by the attainment of ego autonomy, sexual identity and secon individuation (Erikson, 1968; Blos, 1979) remains a moot point in the literature (Kohen-Raz, 1988).

Adolescence has been differentiated into various stages in the psychological literature. For many years, studies in adolescence focused upon the older adolescent. However, the 70's heralded a new trend in the literature. An increasing number of publications began to focus upon the early years of adolescence (Blos, 1971). According to Blos (1971, 1979), the importance of early adolescence is generally not sufficiently appreciated. He asserts that early adolescence is the most crucial stage in the adolescent process as a whole as it decides critically the course which adolescence will take subsequently (Blos, 1971). In a similar vein, Petersen and Hamburg (1986) suggest that the transition during early adolescence is crucial in the development of healthy status versus problems and psychopathology. They propose that with respect to early adolescence, developmental outcome is contingent upon the fit between current challenges and the individual's resources for coping with such challenges (Petersen and Hamburg, 1986).

4.2 "Theories" of Adolescence

It would be erroneous to speak of theories of adolescence as no theory deals simply with adolescence. Each theoretical conception of adolescence constitutes a part of a broader view of the developmental continuum, whether this be biological, psychological or social (Eichorn, 1968). A thorough examination of the central theoretical conceptualisations in the field is beyond the scope of this dissertation. The developmental theories of Erikson (1950,1968) and Piaget (1970), as they relate to adolescence, will be briefly considered.

4.2.1 Erikson

Of the Neo-Freudians, Erikson (1950, 1968), whose major concern is with affective development, has detailed the developmental sequence most explicitly (Eichorn, 1968). He postulates eight psychosocial crises which cover the life-span from infancy to old age. The first five psychosocial crises parallel Freud's (1905) libidinal crises. Although the series is universal, each person arrives at individual solutions from those offered by the institutions of his culture and their representation through significant caretakers. The successful

resolution of each conflict depends upon ego strength developed during earlier crises (Erikson, 1950).

It is the fifth stage of **Identity versus Identity Diffusion** that is concerned with adolescent themes. Achieving a sense of identity while overcoming a sense of identity diffusion represents the polarity of this particular phase. At the one end there is a striving toward integration of inner and outer directions, while at the opposite end there is diffusion which leads to a sense of profound instability in the midst of numerous inner and outer demands (Erikson, 1950, 1968).

During adolescence, marked physical changes and sexual awareness threaten the continuity of the self. Much needed reassurance is sought from peers who are similarly experiencing these changes. These changes, though they may be viewed as exciting, can also be frightening. Genital maturation awakens pride as well as revives the anxiety of the oedipal conflict which must now be resolved. Much ambivalence is experienced by the adolescent who, while needing to assert his independence, also requires that his parents place limitations upon him. These limitations serve as a form of security amidst the inner uncertainties and turmoil (Erikson, 1950).

Adolescents are confronted with continued identity diffusion with regard to their potentialities and prospective place within the community. The primary problem within an industrialised society is selecting a vocational identity. Today, alternatives and choices available to adolescents are vast; this compounds the ever-present question of: "Who am I to be?" According to Erikson, social institutions grant those individuals who need to defer their progression into adulthood, a psychosocial moratorium. Achieved through extended formal education, apprenticeship, military conscription and the like, the moratorium sanctions diffusion as a temporary pivotal component of adolescent development (Erikson, 1950, 1968).

Sexual identity is established later in adolescence. At first the adolescent plunges his/herself into the peer group, over-identifying with its heroes. When s/he begins to fall in love,

the relationship is not primarily sexual. It serves rather, through the projection and reflection of diffused images, to clarify identity. Relationships that demand an abandonment of the self give rise to conflicts in late adolescence and early adulthood (Erikson, 1968).

In order that adulthood is not infused with old struggles, the polarity of identity versus identity diffusion must be resolved during adolescence (Erikson, 1950, 1968).

4.2.2 Piaget

Piaget (1970), an epistemologist, focuses upon qualitative changes in cognitive structures. Perceiving intelligence to be a form of biological adaptation, he postulates a biological model of organism-environment interaction. He postulates a stage theory which comprises three major phases, namely, the **pre-operational phase**, the phase of **concrete operations** and finally the phase of **formal operations**. Each stage has a number of subdivisions, beginning with the infant's undifferentiated world of reflexes and terminating during adolescence in a formal, logical system of combinatorial operations.

According to Piaget (1970), the individual reaches the stage of formal operations at approximately the age of eleven. At this stage of development the individual is capable of hypothetico-deductive and inductive reasoning. S/he is capable of conceptualising and operating not only upon present reality, but also upon abstract and remote possibilities. These abilities provide the intellectual framework for assuming adult roles, assimilating social values and formulating an individualised value system and life plan.
Social interactions become more complex, involving relationships to social institutions and political and ethical codes. It is abstractions, rather than people, that represent ideals and values.

It is asserted by Piaget (1970) that whenever a new cognitive structure is evolving, thought is subjective and undifferentiated. The adolescent attempts to adapt the world to himself,

as much as himself to the world. The views of others are seldom considered and there is a failure to recognize that some adult activities are not yet possible. This lack of differentiation gives rise to conflicts. Objectivity is achieved from experiences within the peer group.

The relationship between cognitive and affective development is not considered in depth by Piaget. However, he conceptualises affective development as being parallel to and interdependent with cognitive organisation. For him, the intellectual transformations of adolescence imply concomitant social transformations and a complete reorganisation of the personality (Eichorn, 1968).

4.3 Stress During Adolescence

While several theories inform an understanding of adolescence, there are no theories that specifically address stress during adolescence. The work of Petersen and Spiga (1982) is important in this regard as they examine the issue of adolescence and stress from a developmental perspective.

It is noted by Petersen and Spiga (1982) that one's course and experience through life is influenced by many factors. Many of these factors are unpredictable and uncontrollable. However, there are periods of life involving predictable features that influence the course of development at that phase as well as subsequent phases of the life course. Such times of life have come to be termed "critical developmental transitions". Adolescence, and particulary early adolescence, may be seen to be one of these critical transitional periods (Petersen and Hamburg, 1986). According to Simmons (1985, cited in Petersen and Hamburg, 1986), the sheer number of changes experienced by the developing young person is predictive of the amount of adjustment problems seen at this age. The primary significance of a critical transition may be the role that it plays in creating stress and demanding effective coping. The possibility of too much stress and the possibility of exciting challenge and change both confront the early adolescent (Petersen and Hamburg, 1986).

The developmental stresses of adolescence are summarised by Petersen and Spiga (1982) as follows: Puberty (adult appearance and size, reproductive capacity, timing, internal endocrinological changes, asynchrony among body parts); cognition (capacity for abstract thought); peer group (conformity, pressure to try new experiences); school (changing school structure and format); parents (parental response to adult size of adolescent, sexual stimulation, implications for parent aging, impending separation); society (hopes and expectations for youth, occupational choices and opportunities). They assert that many of the stresses are interrelated and that individuals will be affected by stress to varying degrees. Factors which mediate the effects of developmental stress in adolescence include: the timing of developmental changes, the extent of preparation for these changes, individual vulnerability and social supports.

In summary, adolescents are assailed by profound changes in mood and temperament. Cognitively they undergo a vast leap from concrete to abstract reasoning. They are faced with the difficult task of assimilating their internal experiences with their outer worlds. Individuals who are vulnerable at this time are more likely to develop negative outcomes. However, successful coping may serve to augment subsequent development and resilience (Petersen and Hamburg, 1986). In the following chapter, issues in the stress and coping literature relating specifically to adolescents will be examined.

CHAPTER 5:
STRESS AND COPING DURING ADOLESCENCE

There has been a tremendous output of scientific and clinical studies on adults over the years. However, the effort to observe, record and study the reactions of children and adolescents to stressful events has remained an area of comparative neglect (Hirsch, 1985; Garmezy, 1988). It is only in recent years that a growth of interest in research on children and adolescents under stress has been witnessed (Garmezy, 1986). According to Compas (1987b), the study of stress and life events during childhood and adolescence is emerging as an interesting and important area of clinical research. Similarly, empirical investigations of coping with stress during childhood and adolescence have generated rich data (Compas, 1987a). In the ensuing paragraphs, the literature on stress and coping during adolescence will be reviewed.

5.1 Stress

5.1.1 Negative Life Events Versus Daily Stressors

Research that has explored the relationship between stress and psychological adjustment in children has focused upon various negative life events. There have been studies on bereavement, divorce, sexual and physical abuse, illness and disability, war and terrorism, to name but a few (Garmezy, 1986). In comparison, research in the adolescent arena has been described as being in an underdeveloped state (Hirsch, 1985). In recent years there has been a growth in literature on the relationship between stress and psychological adjustment in adolescents (e.g. Compas, 1987b; Powers *et al*, 1989).

As with children, most work with adolescents has centred upon negative life events. Research has shown support for a relationship between negative life events and: depression (Hudgens, 1974; Daniels and Moos,1990) suicide (Crook and Raskin, 1975; Billings and Moos, 1982), decreased levels of self-esteem (Youngs *et al.*, 1990; Greenberg, Siegal, and Leitch, 1983), delinquent behaviour (Vaux and Ruggiero, 1983; Novy and Donahue, 1985), increased levels of anxiety (Daniels and Moos, 1990), and inadequate school performance (Fontana and Dovidio, 1984). Factors associated with the development of one type of problem over another in response to stress have yet to be delineated (Compas, 1987b). With regard to types of stressful events, some domains, for example; family, deviance and distress events, appear to be more closely related with symptoms than other types of events (Compas, 1987b).

The predictive power of negative life events has been shown to be quite limited (Siegal and Griffin, 1984). Recent prospective studies provide greater support for the role of chronic strains and daily stressors than major life events in the development of adolescent psychological and behavioural difficulties (Compas, 1987a, 1987b). Chronic demands are those enduring aspects of the social and/or physical environment which involve deprivation or disadvantage and create ongoing threats and challenges for the individual (Compas, 1987b). Such demands may arise from psychosocial adversity, which includes the family and economic environments in which the child functions (Rutter, 1988). They may also result from personal characteristics of the individual. Further, chronic demands may occur in the form of recurring events as in the case of repeated parental conflict.

A study conducted by Wagner,Compas and Howell (1986; cited in Compas, 1987b) found that daily stressors mediated the relationship between major life events and symptoms. That is, major events were found to be predictive of daily events and daily events predicted symptoms, but there was no direct relationship between major events and symptoms. The current view is that life events tap only a small part of an adolescent's life context. Further, they may exert their influence by changing long-term stressors and resources (Swearingen and Cohen, 1985). It therefore appears that chronic stressors, including daily problems and characteristics of the psychosocial environment, hold greater promise than major life events in understanding the development of psychological distress in adolescence.

In the light of the above, there has been a renewed emphasis on chronic / everyday stressors in the field of adolescent stress and coping. This has been hailed as a promising development in the field (Daniels and Moos, 1990). Everyday stressors have been associated with adjustment problems, especially if youths are subject to multiple daily stressors in combination or in a cumulative manner (Cohen, Burt and Bjorck, 1987; Compas, Davis and Forsythe, 1985). Among the youth, chronic stressors in family, school and peer relationships have been associated with anxiety, depression, lowered self-confidence, as well as with social and behavioral dysfunction (Daniels and Moos, 1990; Siddique and D'Arcy, 1984). Gersten *et al.* (1977) found that stressful features of the psychosocial environment, such as socioeconomic status, quarrels between parents and mother's physical or emotional illness, accounted for a significant portion of symptomatology exhibited by adolescents.

In the light of the many stressors adolescents may experience, as well as the increase in the reports of stress-related disorders among this age group, Stark *et al.* (1989) highlight the need for greater attention to be given to investigating the problems typically encountered by adolescents. Their study (with adolescents aged 14 to 17 years) revealed that adolescents most commonly report experiencing problems with school, parents, friends and boy/girlfriends. Their findings are consistent with notion that adolescence is a time when major changes in family, school and peer group structures occur (Petersen and Hamburg, 1986). Their results are also similar to the problems reported by Brown *et al.* (1986) for the adolescent portion of their sample.

With respect to sex differences, Stark *et al.*(1989) suggest that such differences need to be examined more closely when common problems of adolescence are evaluated. They found that the order of most commonly reported problems among boys was: school, parents, friends and girlfriends. Girls more frequently cited problems with parents, followed by boyfriends, friends and school. In a similar vein, Newcomb *et al.*(1986) reported consistently strong differences in the perception of life events among adolescents by sex. They found that, in general, females perceive undesirable events as more undesirable and desirable events as more desirable than do males. It is documented by Compas (1987b) that with respect to gender differences: girls have been found to rate events as more stressful than boys; they also report more major negative events and daily problems. Several studies

report a higher correlation between negative life events and psychological symptoms for girls than for boys. The above studies indicate that sex is an important variable mediating the types of events most commonly reported by adolescents and how such events are perceived. According to Walker and Greene (1987), it is important to consider the influence of sex on responses to stress since sex-role development is well underway by adolescence.

5.1.2 Socio-Political Disadvantage as an Antecedent of Stress

The bulk of stress research is concerned with the sequelae of stress not with its antecedents. However, while current research still tilts predominantly in the direction of the consequences of stress, a growing concern with its naturalistic origins can be discerned (Pearlin, 1982). The population under investigation is the so-called Coloured population who may be considered to be socio-politically disadvantaged. In the following paragraphs, a definition of the term "disadvantaged" is adopted. In addition, the issue of socioeconomic status and its relationship to mental health is examined.

i) Definition of the term "Disadvantaged"

The Coloured community in South Africa may be regarded as being socio-politically disadvantaged. The term "disadvantaged" is a controversial one, with much disagreement existing over who is to be considered disadvantaged as well as over the particular factors or circumstances that contribute to their being so.

Certain writers regard individuals as culturally disadvantaged if, due to social, ideological, and religious disabilities, they have failed to enjoy culture and education to the fullest. Others assert that economic factors are of primary importance and thus see the disadvantaged as simply being the poor (Frasier, 1979). Gowan (1969) proposes that one is disadvantaged if one is reared by poor, lower-class parents out of the cultural mainstream. It is proposed by Baldwin (1978, cited in Frasier, 1979) that three sets of external influences

define who should be included in the category of the "disadvantaged". These influences include:

- *Cultural diversity - a condition of racial, ethnic, language, or physical difference from a dominant culture.

- *Socio-economic deprivation - a condition of legal or *de facto* denial of social interaction combined with substandard housing and employment.

- *Geographic isolation - a condition of being geographically located away from the mainstream society.

The definition of disadvantaged adopted for the purposes of the present dissertation is that proposed by Baldwin. The motivation for adopting this definition is that its broad nature encompasses a range of conditions under which an individual may be regarded as disadvantaged. It is proposed by the writer that where the physical and emotional well-being of individuals is concerned, it is best to adopt as broad a definition as possible. Baldwin's definition is particulary applicable within the South African context where the majority of individuals find themselves subjected to the influences that he delineates.

Supplementing the above definition, the writer would like to add a fourth influence; namely, cultural deprivation. Cultural deprivation constitutes a syndrome whereby an individual has become alienated from his/her own culture (Feuerstein, Rand, and Hoffman, 1979). It is proposed that, with the exception of the White population group, this syndrome is prevalent among all the race groups in South Africa.

ii) Socio-economic Status and Mental Health Problems

The positive association between low socio-economic status (SES) and mental health problems is one of the most well established in all of psychiatric epidemiology (Belle, 1990). Decades of research have consistently documented the inverse relationship between socio-

economic status and a variety of important types of disorder (Belle, 1990; Billings and Moos, 1982; Dohrenwend, 1990; Vingerhoets and Marcelissen, 1988). In addition to the correlation between SES and adult psychopathology, epidemiological studies also show a greater prevalence of child and adolescent psychopathology at lower SES levels (Gad and Johnson, 1980; Wills and Lagner, 1981). It has been found that stressful characteristics of the psychosocial environment account for a significant proportion of symptomatology displayed by adolescents (Gersten, Lagner, Eisenberg, and Simcha-Fagan, 1977).

Over the years these findings have raised and re-raised the classic social causation versus social selection issue. The social causation hypothesis holds that those of lower SES experience a greater number of environmental stressors (Dohrenwend, 1990; Gad and Johnson, 1980; Meyers, Lindenthal and Pepper, 1974). The frequency of negative life events and/or total life events is positively related to levels of psychological and physical dysfunction (Compas, 1987b). Individuals from low SES groups tend to be more exposed to unemployment and its concomitant financial uncertainties, inadequate housing, dangerous neighbourhoods, burdonesome responsibilities, poor health and a variety of other stresses (Kessler, 1979). It has been asserted that chronic life conditions, such as those described above, can be even more potent stressors than acute events and crises (Brown, Bhrolchain and Harris, 1975). According to the social selection hypothesis, rates of mental illness are higher in lower SES groups because individuals with the disorders, or personal characteristics predisposing to the disorders, drift down into or fail to rise out of lower SES groups. Others have suggested that even for schizophrenia, where much evidence supporting selection has been accumulated, both processes are operating. The social causation-social selection issue still remains to be resolved (Dohrenwend, 1990).

It is noted by MacClennan (1968) that disadvantaged individuals typically live in deprived and neglected areas where overcrowding is prevalent and where public resources and facilities are few. He asserts that under such conditions the disadvantaged youth have the right to feel frustrated and resentful at the rest of society which acts as a depriver.
It is understandable that a high proportion of youth from such areas are angry and find themselves in trouble. They may have great aspirations but generally are not equipped to achieve them. Among such populations, rates of school drop-out and unemployment are high. The boys and girls in such communities do not acquire the basic skills

necessary for achievement, lack practice and perspective in obtaining data, beyond their immediate situation, which is necessary for successful long-term planning, and frequently do not manage to earn an adequate living or to establish a stable and fulfilling family life. With little hope for the future, such youth tend to have low frustration tolerance and to live impulsively. Basic feelings of despair and failure tend to be masked by living for the moment, by obtaining status and success through establishing a separate and deviant culture, by living in a fantasy world, or by exploiting the rest of the world through inadequacy and dependency. Consequently many are dependent, delinquent, mentally ill, view the world as hostile and untrustworthy, and project, deny and avoid responsibility (MacClennan, 1968).

It is widely held that low SES carries with it negative psychological consequences. Low SES has been correlated with a belief in the inability to control one's life. A lack of access to material goods, opportunities, and personal support serve to reinforce such a belief (Heller, Price, Reinharz, Riger and Wandersman, 1984). Moritsugu and Sue (1983) highlight the feelings of powerlessness that accompany the belief that one has low control over one's fate. It is noted by Pearlin *et al.* (1981) that unyielding role strains confront individuals with persistent evidence of their own failures, together with proof of their inability to change their negative life circumstances. In such circumstances, people become vulnerable to the loss of self-esteem and to the erosion of mastery. They assert that such loss constitutes an important element in the causal process leading to depression. In addition, feelings of worthlessness, guilt, failure (Masterpasqua, 1989) and rage (Dohrenwend, 1973) have been identified as debilitating psychological consequences of low SES. It is asserted that racism, sexism and other forms of disenfranchisement play a central role in affecting a sense of powerlessness and demoralisation and in ultimately increasing the incidence of psychological disorders (Masterpasqua, 1989). Finally, it has been shown that children are more vulnerable to stressors of a less extreme nature than those which may lead to post-traumatic stress disorder in adults (Hyman, Zelikoff and Clarke, 1988). According to Hyman *et al.* (1988), increasing poverty has led to increasing numbers of children developing symptoms similar to those manifested in post-traumatic stress disorder. They report that the physical and emotional abuse that underlies disciplinary action taken in schools, can lead to the development of post-traumatic stress symptoms in children.

In sum, recent research indicates that daily stressors and chronic strains play a central role in the development of adolescent psychological difficulties. Adolescents from low SES populations may be seen to be particulary vulnerable to stress.

5.2 Coping

As outlined above, acute and chronic stressful events in the lives of adolescents are significantly related to emotional and behavioral problems. However, marked individual differences exist in the levels of problems that are associated with stressful experiences. This variability is due to methods used by adolescents to cope with stressful events, the resources available to them, as well as to personal and environmental characteristics (Compas, Malcarne and Fondacaro, 1988). Coping in childhood and adolescence has been represented by several divergent lines of research (Compas, 1987a). These will be examined below.

5.2.1 Coping Strategies

There is a paucity of research regarding the nature of a typical adolescent's coping strategies and consequently little is known about the kinds of coping responses characteristic of adolescents (Wayment and Zetlin, 1989; Stark, Spirito, Williams and Guevremont, 1989).

Recent empirical studies of adolescents (e.g. Compas, Malcarne and Fondacaro, 1988) have focused upon identifying specific coping strategies. These studies have been influenced, to varying degrees, by Lazarus and Folkman's (1984, 1987) transactional model and the distinction between behavioral and cognitive coping, broadly defined (Glyshaw, Cohen and Towbes, 1989). It is recognised that coping results from a combination of individual and life event-related characteristics (Compas, Malcarne and Fondacaro, 1988). There is, however, some data to suggest that the coping strategies employed by young adolescents

display moderate cross-situational and temporal stability (Compas, Malcarne and Fondacaro, 1988; Wills, 1986). This contrasts with the considerable variability in coping across situations exhibited by adult samples (Billings and Moos,1981).

Relatively few child and/or adolescent studies have examined the relationship between coping and psychological distress, broadly defined. In keeping with findings in the adult literature, the extant child and adolescent literature has reported a relatively consistent negative relationship between problem-focused coping, broadly defined, and concurrent psychological distress. Also consistent with the adult literature, the findings for child and adolescent emotion-focused coping are inconsistent (Glyshaw, Cohen and Towbes, 1989).

It is proposed by Compas, Malcarne and Fondacaro (1988) that adaptive problem-focused strategies are more fully developed in older children and young adolescents than emotion-focused coping strategies. However, cognitive, or emotion-focused, coping strategies have been found to be successful in helping children to cope with fears, aversive medical procedures and hospitalisations (Brown, O'Keeffe, Sanders and Baker, 1986). Brown *et al.* (1986) assert that since there are many potentially painful and stressful situations in which direct action modes are limited (for example, injury or hospitalisation) cognitive coping strategies assume particular importance.

In an investigation of developmental changes in children's coping cognitions, Brown *et al.* (1986) suggest that coping increases significantly with age. Twice as many 16-18 year olds in their sample reported predominantly coping cognitions as did 8-9 year olds. In addition, older children used a greater number of different types of coping strategies. They report that positive self-talk and attention diversion were the most common coping strategies reported in their sample of adolescents aged 14 - 18 years. Spivack and Shure (1985) have shown that the ability to generate a variety of alternative solutions to hypothetical interpersonal problems constitutes a vital component of social problem-solving and is related to behavioral adjustment in children and adolescents. In all age groups, across three treatment situations, positive self-talk was the most commonly reported coping strategy employed. They point out that little is known about the process by which children learn to cope or the

role played by parents, teachers ,siblings and peers in this process. They assert that answers to these questions would go a long way towards expanding our knowledge of how children cope and help to maximise ways to assist children in reducing distress in a variety of stressful situations.

With regard to sex, a study by Stark *et al.* (1989) showed that the use of coping strategies differed by sex. In their study, females reported using social support and emotional regulation more frequently than males. Males reported using wishful thinking more often than females and perceived resignation to be more effective than did their female counterparts. The female adolescent's more frequent use of emotional regulation and social support as coping strategies are consistent with studies in the adult literature (e.g. Billings and Moos, 1981). It would appear from their study that as early as "middle" adolescence, females are more expressive and seek more social support than males do in dealing with stressful situations.

5.2.2 Social Support

Social support research has emerged as an important vehicle for examining adolescent health. It is seen to play a crucial role in facilitating coping with stress (Walker and Greene, 1987; Hirsch,1985; Glyshaw, Cohen and Towbes, 1989). Most studies suggest that social support is positively related to adult mental health (Cauce, Felner and Primavera, 1982; Hobfoll and Freedy, 1990). A relatively large empirical literature exists on the correlates of adolescent's social support (e.g. Hirsch, 1985; Gad and Johnson,1980; Daniels and Moos, 1990). In the literature, social support has been considered as both a resource and a coping strategy (Glyshaw *et al.*, 1989). In this section, social support as a resource will be examined.

Investigations into social resources reveal that good quality relationships with parents and peers are directly linked to better functioning among adolescents. Social resources may also play a role in moderating the potential negative effects of stressful life circumstances (Cobb, 1976; Dean and Lin, 1977). In contrast a lack of support within the family has been associated with adolescent depression (Friedrich, Reams and Jacobs, 1982; Burt, Cohen

and Bjork, 1988; Friedrich, Reams and Jacobs, 1982). More generally, it has been noted that family and other social resources may help to reduce depression and contribute to increased self-confidence (Hirsch, Moos and Reischl, 1985). Some researchers have differentiated between peer and family support. A study by Kaplan, Robbins and Martin (1983) reported that support from peers but not from the family constitutes an important buffer against stress. In contrast, an investigation by Hotaling, Atwell and Linsky (1978) found that parental support acted as a buffer against the impact of stressful life events. Walker and Greene (1987) highlight the importance of exploring the separate contributions of peer and family support to the relationship between life events and distress.

There is some evidence in the literature to show that certain personal coping resources are associated with lower symptomatology in adolescents. Adolescents with an internal locus of control have been found to be less psychologically distressed than their adolescent counterparts (D'Arcy and Siddique, 1984). Individuation has been suggested as being a stress buffering variable, as has belief in one's own personal efficacy (Walker and Greene, 1987).

5.2.3 Resilience or Invulnerability to Stress

In recent years, coping of children and adolescents has been described in studies of resilience or invulnerability (Anthony and Cohler, 1987; Garmezy and Rutter, 1988; Rutter, 1985). This burgeoning line of research has grown from investigations of factors that predispose individuals or place them at risk for developing psychopathology (Compas, 1987a). Several studies (Anthony, 1987; Farber and Egeland, 1987; Fisher, Kokes, Cole, Perkins and Wynne, 1987; Rutter, 1985) have indicated that certain youngsters, who have been exposed to extremely deprived or disadvantaged environments during development, do not suffer emotional or psychological consequences. These findings have stimulated interest in so-called "protective factors" (Rutter, 1985) which have been defined by Garmezy (1985) as:

"...those attributes of persons, environments, situations and events that appear to temper predictions of psychopathology based upon an individual's at-risk status" (p.73).

According to Garmezy and Masten (1986), the search for protective factors is an area of research that only recently has been recognised as the necessary base for truly preventive interventions.

Risk and protective factors are considered to be twin concepts (Garmezy and Masten, 1986). Risk factors refer to those elements operating in individuals or environments that give rise to a heightened probability for the subsequent development of disease or disorder. Risk, therefore, is a population concept that is associated with an increased rate of incidence. Vulnerability indicators, in contrast, have greater specificity and refers to the predisposition or susceptibility of an individual to negative outcomes (Garmezy and Masten, 1986).

Specific risk factors have been identified by Garmezy (1985). Severe marital discord within the family, low social status and poverty, large family size, a pattern of criminality in the parents or on the child, psychiatric disorder (particularly in the mother), and care of the child by local authorities at some point have been isolated as risk factors that predict a variety of poor developmental outcomes. These factors are prevalent in disadvantaged communities.

In contrast with the bulk of literature concerned with coping during childhood and adolescence, studies of resilience have not emphasized what the youth do to cope with stress. Rather, the emphasis is upon the identification of stable characteristics of the child or the environment that reduce the potentially damaging effects of chronic stressors. Across various studies, three broad factors have consistently been found to characterize invulnerable children. These factors include: 1) dispositional characteristics of the child or adolescent, including temperament, high self-esteem, internal locus of control, and autonomy; 2) a supportive family environment that is characterised by parental warmth, cohesiveness, closeness, order and organisation; and 3) a supportive individual or agency in the

environment that offers the child or adolescent a support system to assist in coping as well as positive models for identification (Garmezy, 1985).

In more recent work Garmezy (1985) isolated the following protective factors: self-esteem, feelings of control, a view of the environment as predictable, a positive life view, the ability to elicit positive responses from the environment, a close personal bond with at least one member of the family and a positive school environment.

Rutter (1985) isolates seven mechanisms which he postulates contribute to making an individual resilient to adversity. He underscores the importance of: 1) An individual's appraisal of stressful situation and his capacity to process the experience, attach meaning to it, and incorporate it into his belief system; 2) adopting an active rather then a reactive attitude to life stressors; 3) having a positive self-esteem and feelings of self-efficacy; 4) the presence of temperamental attributes, stable affectional relationships, success, achievement and positive experiences as they appear to foster the above cognitive set. He goes on to note that 5) the above personal qualities appear to be operative both in their effects on interactions with and response from other people and in their role in regulating individual responses to life events. He asserts that 6) successfully coping with stress situations can be strengthening. Finally he posits that 7) the quality of resilience is determined by how individuals cope with life changes. Early life experience, occurrences in childhood and adolescence, and adult life circumstances all influence the quality of resilience.

It is asserted by Garmezy and Masten (1986) that another important construct when considering protective factors is the dimension of competence versus incompetence. Research suggests that competence is a powerful counterforce to psychopathological development. The processes that underlie the development of the multiform aspects of competence have yet to be explicated (Garmezy and Masten, 1986).

It is asserted by Garmezy and Masten (1986) that competent behaviour in social, sexual, and work areas is an important modifier of the negative impact of severe stressors. Incompetent behaviour in these areas heightens the individual's vulnerability to such

stressors. The importance of self-esteem and personal efficacy in reducing vulnerability to stressors has been underscored (Walker and Greene, 1987). In their investigation of the contributions of personal, family, and peer resources in protecting adolescents from psychophysiological symptoms associated with negative life events, they found that regardless of the frequency of negative life events, adolescents with a stronger sense of personal efficacy reported fewer symptoms.

According to Garmezy and Masten (1986) cognitive-behavioral interventions have the crucial task of heightening competence through skills training, reinforcement of positive behaviours, facilitating shifts in attributional processes, assisting in role modelling and the like.

In summary, individuals respond differently when confronted with stress. These differences may be due to coping methods employed, social support, and /or personal and environmental factors. An intervention programme that addresses these areas in some measure may render stressed adolescents more resilient to future stresses.

CHAPTER 6:
INTERVENTION WITH ADOLESCENTS

As the awareness of the negative effects of daily stressors and major life events upon adolescents has grown, so the need for intervention efforts to reduce stress and related emotional arousal within this age group has become increasingly important (Hains and Szyjakowski, 1990). Gad and Johnson (1980) propose that special attention should be given to the development of appropriate stress management techniques for application with adolescents from lower socioeconomic status groups. These adolescents experience higher levels of negative life change than adolescents form higher SES groups. Coping and adaptational skills are developing rapidly during the early years of one's development, changing the effects that events exert on individual functioning. Childhood and adolescence have thus been targeted as critical periods for prevention programmes designed to enhance coping skills and reduce the negative effects of certain events (Compas, 1987a, 1987b; Romano, 1988). In the present chapter, issues relating to therapeutic intervention with adolescents, as well as well-known techniques employed in interventions, will be examined.

6.1 Issues Relating to Intervention

The task of working therapeutically with adolescents is notoriously difficult. According to Laufer (1983), the task of intervening on a psychiatric or psychological level with adolescents is complicated by a number of factors; some residing in the adolescent, some in the would-be helper. With respect to the adolescent, complexities arise from the reluctance to acknowledge distress, the penchant for externalisation, and the frequently shifting character of mental organisation. The task of the concerned professional is hampered by a lack of clarity about developmental norms and expectations, vague criteria for assessment of pathology, and the paucity of valid data about the relative efficacy of specific therapeutic interventions.

It is asserted by MacClennan (1968) that there are difficulties in individual and group psychotherapy with socially disadvantaged youth over and above those which occur with adolescents from other social classes. First, the therapist is usually middle-class and as such is socially and often also culturally and ethnically different from the youth. It is thus difficult for the youth to be at ease or identify with such a therapist. Secondly, the therapist often has no first hand knowledge of how these adolescents live. Thirdly, disadvantaged youths tend to have their own way of speaking which is felt by them to be an integral part of their identity. If the therapist does not understand their dialect the youth may be forced to converse in an alien dialect; a situation which greatly increases the stress of the therapeutic situation. Fourth, much of psychotherapy is reflective and concerned with abstracting, conceptualising, generalising, and reapplying. These youths are accustomed to the concrete, the real, and the immediate. Their primary interests and energies are concentrated in the problems of everyday living and the experiences of the moment. They prefer action to thought. Finally, the depth of mistrust and suspicion which disadvantaged youth have of adults is usually much greater than that of more fortunate teenagers and more justified by their experiences (MacClennan, 1968).

The value of group therapy with adolescents in general (Berkovitz and Sugar, 1975), and disadvantaged adolescents in particular (Barcai and Robinson, 1969; Allgeyer, 1970; MacClennan, 1968), has been widely attested to in the literature. A central advantage of group therapy with adolescents is the feeling of protection vis-a-vis the adult-therapist. Many adolescents experience discomfort in one-to-one interactions with adults. Adolescents have a natural propensity to form and communicate in groups of peers. They tend to utilize the peer group as a source of emotional support. The opportunity to interact with peers is less associated with illness and safer from possible adult domination. Small groups allow exposure of typical behavioral patterns. This leads to a decrease in feelings of isolation and of being peculiar, with a concomitant rise in self-esteem. In addition, small groups foster new ways of dealing with situations, along with an evaluation of techniques in use (MacLennan, 1968; Berkovitz and Sugar, 1975; Esman, 1983).

Since its conception by Slavson (1945), group therapy has been used by many therapists either as an adjunct to individual treatment or as the primary treatment modality (e.g. Malan, 1963). Therapeutic groups for socially disadvantaged adolescents, as for other

populations, have varied greatly in what they have been designed to accomplish and how their membership has been selected. Groups have been run in order to identify general problems and work on ways of resolving them, to resolve a particular difficulty, or for overall life adjustment or character reconstruction. Selection has been made either on the basis of overt problems or following a thorough diagnostic evaluation. Depending upon the particular theoretical orientation of the therapist, grouping may be homogenous or heterogenous, monosexual or heterosexual (MacClennan, 1968).

The therapeutic and growth values of groups run in schools, with or without therapeutic orientation, has been attested to in the literature (Barzai and Robinson, 1969; Berkovitz and Sugar, 1975; Deffenbacher and Shepard, 1989; Romano, 1988). Recognition that access to youth is maximised through the school system, has led to the school being identified as a valuable setting for conducting stress management or crisis intervention programmes (Allan and Anderson, 1986; Ayalon, 1979; Romano, 1988; Rigamer, 1986; Terr, 1989; Weinberg, 1989). During a national disaster in Afghanistan and Pakistan in 1978, crisis intervention in the classroom, across all age ranges, formed an integral and effective part of the intervention programme carried out by Rigamer (1986). A coping skills programme implemented in the classroom by Allan and Anderson (1986), with 7, 10 and 13 year old children, proved to be effective in helping the children to: discuss crises they had experienced, understand the common thoughts and feelings that crisis events activate, and consider future adaptive coping strategies. Finally, a study conducted by Deffenbacher and Shepard (1989) suggests that the classroom can be a practical medium for increasing academic knowledge about and personal skills for stress reduction.

Schools typically bring in outside mental health consultants to provide crisis counselling or stress management. However, Weinberg (1989) underscores the importance of training school-based personnel to provide crisis counselling themselves. He asserts that training permanent staff in crisis counselling and stress management techniques has two principal benefits: First, it increases the number of people capable of providing intervention in times of need, and, secondly, it enables people who are familiar with the particular student body to serve this body. It has been noted that the presence of outsiders in the school, no matter how well intentioned, can be perceived as intrusive and as undermining the school's desire and ability to help their students themselves (Toubiana, Milgram, Strich and Edelstein,

1988). In keeping with these sentiments, Pynoos and Eth (1985, cited in Terr, 1989) have trained selected teachers in the Los Angeles area to work therapeutically with groups of school children in the event of traumatic situations.

Most stress-reduction intervention efforts have focused on teaching youths to cope with specific stress-related issues; such as, hospitalisations, phobias, and a variety of medical procedures (Hains and Szyjakowski, 1990). Procedures designed to assist children and adolescents in coping with a wider range of stressors, or prevent stress-related problems before they arise, have received little attention (Segal, 1988). An exception in this regard is a study by Hains and Szyjakowski (1990). They conducted a cognitive intervention programme focusing on stress reduction. Youths were instructed on how to identify and monitor stress-promoting cognitions, restructure such cognitions into more adaptive thoughts, use self-instructions to control stress-engendering self-statements, and practice and apply these acquired skills. As compared to a waiting list control group, the youths in the experimental group showed significant reductions in levels of anxiety and anger, improvement in self-esteem and an increase in the number of reported positive cognitions in response to a hypothetical situation. Treatment gains were maintained at a ten week follow up. The results of their study suggest that cognitive stress reduction procedures are useful in assisting adolescents to cope with both daily and major life stressors. In terms of preventative programmes, the work of Lahad and Cohen (1981) and Ayalon (1979, 1983, 1987) in Israel is of central importance. Their approach is group orientated and aims to prepare not only the youth but entire communities for the ongoing threat of terrorist activity. Their aim is to assist individuals in coping both psychologically and physically with such attacks, thereby reducing stress-related symptoms. Feedback on the effectiveness of their programmes has been positive.

Group work approaches to working specifically with stress have been widely supported in the literature (Ayalon, 1983; Genevay and Simon-Gruen, 1979; Hains and Szyjakowski, 1990; Tolman and Rose, 1985). However, criticisms have been levelled at this approach. Matheny *et al.*, (1986) indicate that individualised approaches to stress management are more effective than group approaches. However, they acknowledge that individualised treatment approaches lack the economy associated with group administration. Witmer (1986) similarly highlights the limitations of a group treatment format. It is suggested that if individual assessments are made and multiple treatment modalities are provided in a group format, treatment effectiveness may increase.

6.2 Techniques Employed in Interventions

A wide variety of therapeutic techniques are employed in stress-reduction interventions (Dobson, 1988). These therapies include expressive, cognitive and behavioral modes of intervention (Ayalon, 1987). The importance of integrating various well established therapeutic techniques in order to achieve effective therapeutic results has been highlighted in the literature (Lazarus, 1971, 1976; Keat, 1979). Some of the major approaches to intervention will be examined below.

6.2.1 Expressive Modes

It is widely believed that ventilation of feelings, whether by drawing, talking or re-enacting, is an important and adaptive coping strategy when people encounter stresses that they cannot control (Meichenbaum and Cameron, 1983; Ayalon, 1983). A variety of techniques have been employed in order to foster expressive modes of coping. These will be briefly outlined below.

a. Free Writing:

The literature indicates that self-generated creative writing in the form of free-form poetry and prose, structured exercises and activities, is increasingly being used in a variety of clinical settings. The use of writing in clinical settings is based upon principles similar to those of projective testing; that is, that responses to ambiguous stimuli reveal the inner world of unexpressed images and thoughts. Direct expression may be elicited by way of carefully selected verbal and non-verbal stimuli; namely, pictures, recorded sounds, newspaper headlines, music, and so on (Ayalon, 1987). The areas in which writing is being used include: Short-term group therapy, career counselling, alcoholism counselling, children in crisis, adolescent groups, abused children , college students and incest survivor groups (Wenz and McWhirter, 1990; Allan and Anderson, 1986). In addition, writing approaches

have been used to treat clients with fears, anxieties, depression and guilt (Wenz and McWhirter, 1990).

According to Wenz and McWhirter (1990), free writing stimulates group development by heightening intimacy and cohesion. They note that creating and sharing writing seems to improve and increase self-disclosure, self-actualising behaviours, and self-acceptance of feelings and experience. It would appear that this is partly due to the function of writing as a way of expressing ideas, attitudes and feelings in an indirect manner as if they are abstract or belong to someone else. According to Pennebraker, Colder and Sharp (1990), requiring individuals to translate previously inhibited traumatic experiences into language through writing, produces important physical and psychological effects. They conclude that writing about traumas or other stressors has positive long-term psychological benefits. As a form of therapy the writing technique is simple, inexpensive and free of potentially negative social feedback.

Free writing in a group therapy environment may serve to elicit new and significant insights and feelings that may not surface through other therapeutic modalities (Pennebraker, Colder and Sharp, 1990). It is suggested that this affect grows from the inner-self which is tapped through intuitive, creative writing (Wenz and McWhirter, 1990). By placing feelings and thoughts into words, the writer is able to achieve a more comprehensive view of the stressful event and eventually restore a more realistic perspective. Expressing in words previously repressed and unexpressed thoughts and feelings is the general principle underlying psychotherapy. With particular regard to children under stress, writing constitutes a socially acceptable medium for revealing reactions to their environment (Ayalon, 1987).

b. Bibliotherapy:

Bibliotherapy has received sporadic attention from health professionals over the years (Cohen, 1987). As a treatment technique it refers to the carefully planned use of literary writing and literary forms to facilitate and enhance coping behaviour (Gardner, 1972; Ayalon, 1987; Barron, 1974). The theoretical framework for bibliotherapy, based on

psychoanalytic concepts, is as follows: Reading, hearing, or listening to imaginative literature triggers a process of identification, catharsis, and insight which frees the unconscious (Cohen, 1987). It is noted by Shirian (1978, cited in Ayalon, 1987) that literature acts as a mediator between the reader and difficult realities. It allows one to achieve both the distance and the involvement necessary for an effective assessment of one's problems. Involvement facilitates the emotional experiencing of relevant issues, while distancing creates a feeling of safety which in turn eases defensive behaviours. According to Lahad (1989), children take from stories only those materials which are needed and process them according to their ability as well as to their particular stage of development. Ayalon (1987) highlights the importance of bibliotherapy in helping people to deal with stressful experiences.

c. Movement and Non-Verbal Communication:

Movement constitutes a primary means of expression and communication (Ferreira, 1978). The benefits of movement as an expressive form of coping are as follows:

*Under stress, the capacity to communicate may become severely inhibited. Guided movement serves to facilitate expressive behaviour, thereby releasing accumulated tensions.

*Free movement allows the expression of thoughts and feelings that are usually censored.

*Flowing, relaxed movements induce feelings of confidence self-awareness and control.

*In a group setting, such movement fosters group participation and support (Ayalon, 1987; Keat, 1979).

Non-verbal communication in the form of drawings can be highly effective in assisting individuals to communicate pent up emotions surrounding stressful events (Kramer, 1971; Terr, 1989). Allan and Anderson (1986), in a classroom discussion with children around stressful situations, found that drawings tended to elicit far deeper expressions of feeling

and more painful self-disclosure than did verbal discussions of crisis events. Pynoos and Eth (1985, cited in Terr, 1989), in their various studies of children who have been severely traumatised, have usefully employed the projective method of free drawings to gain access to these children's cognitive and affective responses to such events.

d. Psychodrama and Role Play:

Psychodrama, developed originally by J.L. Moreno (1953), is a method of psychotherapy in which the patient enacts meaningful experiences rather than simply talking about them. It includes methods such as sociodrama, sociometry, role playing and an array of techniques that facilitate group processes (Blatner, 1985). Psychodrama is a method that fosters the following skills: learning to communicate well with others; living in the present; understanding the roles we play in everyday life and the interactions we have with others; feeling free to use imagination and creativity in everyday life; and finding new answers to the demands of life. It is asserted by those in the field that it is often easier to act out conflicts in the guise of a fictitious character than it is to give them direct expression (Greenberg, 1974; Fox, 1987; Goldberg, 1989).

Psychodrama and role-playing are deemed to be effective approaches when working with children for the following reasons:

*They are amenable to children who cannot easily use reading or writing as a means of expression.

*They are accessible to non-verbal children who can use body language and other forms of non-verbal expression.

*By acting out painful experiences, one moves from the passive, hurt role to that of one in control.

*They represent ways of rehearsing unfamiliar situations and attaining new modes of reacting in an unthreatening environment (Ayalon, 1987).

The importance of role-play in practising cognitive-behavioral coping skills is well documented (Janis, 1983; Meichenbaum and Cameron, 1983). Its usefulness when working with early adolescents has been noted (Mabee, 1986).

e. Simulation Games:

A simulation game is one that is created to imitate a specific social situation. It requires role-taking and decision making. Game procedures and rules are used to create a situation that closely resembles reality (Lahad, 1989). Through the activity of complicated situations, simulation games provide valuable opportunities for learning without the fear of real-life failure. Such games require the following skills, all of which are considered important in preparing for and coping with stress: creative imagination, problem-solving skills, strategic thinking, and the generating of alternative solutions (Ayalon, 1987). The usefulness of such games in stress reduction and prevention has been attested to in the literature (Lahad and Cohen, 1981).

6.2.2 Cognitive and Behavioral Methods

Cognitive-behaviour therapy has developed into a major therapeutic force (Dobson, 1988). In the section that follows, some of the major therapies associated with the cognitive-behavioral tradition will be briefly described.

a. Assertiveness Training:

Competence in verbal communication is vital to the management of anxiety and stress. Assertiveness training constitutes one cognitive-behavioral means of improving communication skills (Diamond and Songer, 1972; Wolpe, 1969). This procedure involves learning

the expression of appropriate affect, as well as the assertion of one's reasonable rights. It should be noted that assertiveness training is not training in aggression, either verbal or physical. The goal of assertiveness training is to equip the individual to cope with the various conditions of stress in an effective and appropriate manner. As with all other cognitive-behavioral skills, behaviour rehearsal constitutes an integral part of assertiveness training (Wolpe, 1969; Ayalon, 1987).

b. Cognitive Restructuring:

Cognitive appraisal plays a central role in determining the intensity of arousal in stressful situations (Lazarus and Folkman, 1987). Several variant forms of cognitive restructuring or cognitive-behavioral interventions exist.

i) **Rational Emotive Therapy (RET):** RET (Ellis, 1977) is a well established cognitive therapy for restructuring behaviour that has greatly influenced other cognitive approaches (Dryden, 1984). RET is consistent with the view that cognitive processes mediate negative emoti[illegible] An individuals perception of experiences, rather than the actual experiences, are seen to be causal to impaired emotional responses. It is asserted by Ellis (1977) that 12 irrational beliefs are at the root of negative emotional responses. Intervention focuses on assisting individuals to identify these irrational beliefs and then replace them with more constructive thoughts. Research evidence suggests that RET is more effective than no treatment or than a placebo on key measures in most studies (Wilson and O'Leary, 1980).

ii) **Self statements:** According to Meichenbaum (1977), what we say to ourselves serves as important guides to our behaviour, modifies our emotional reactions, and influences our conduct in stressful situations. Meichenbaum's cognitive-behavioral approach consists of training indiyiduals to identify and become increasingly aware of maladaptive or self-defeating self-statements. In addition, by way of cognitive modelling and rehearsal, treatment focuses upon training the individual to generate and apply a set of adaptive self-instructions that may then be employed in stressful situations (Meichenbaum and Jaremko, 1983; Girodo, 1977). This technique of stress inoculation has proven useful in a generalised way as a stress management technique in different types of stressful situations (Craighead and

Craighead, 1980; Cameron and Meichenbaum, 1982, Stoyva and Anderson, 1982; Janis, 1983).

c. Systematic Desensitization:

Systematic desensitization is a substitution therapy developed by Wolpe (1969) to treat problem behaviours maintained by anxiety. Essentially, the goal of this therapy is to replace a negative reaction to a particular class of situations with a positive reaction. While engaged in adaptive behaviour that is incompatible with anxiety, the individual is gradually exposed to successively more anxiety-provoking situations. The client thus learns to react to previously anxiety provoking situations with adaptive responses. Systematic desensitization comprises three sets of operations. Initially the client is taught a response that is incompatible with anxiety. Thereafter, specific details of the clients anxiety, or other negative emotional reactions, are evaluated and an anxiety hierarchy is formulated. Finally the actual systematic desensitization is implemented. This involves the repeated pairing of the response that is incompatible with anxiety and the anxiety provoking events (Wolpe, 1969; Wolpe and Lazarus, 1966).

d. Problem Solving Skills:

Problem solving is widely held to be an adaptive form of coping behaviour and therefore an important treatment domain in stress management programmes (Glyshaw, Cohen and Towbes, 1989; Tache and Seyle, 1978; Matheny *et al.*, 1986; Meichenbaum and Cameron, 1983; Janis, 1983; Pearlin and Schooler, 1978). It is maintained that, where it is possible, direct action to eliminate or reduce stressors is preferable to strategies to tolerate them (Tache and Seyle, 1978; Matheny *et al.*, 1986). Efforts to eliminate or weaken stressors require the application of problem-solving skills. These skills include: defining the problem, seeking relevant information, challenging unnecessarily limiting assumptions, identifying alternatives and considering their consequences, taking action on the most promising alternative, and modifying one's choice when necessary (Ayalon, 1987; Matheny *et al.*, 1986).

e. Relaxation Training:

Training in relaxation skills forms an integral part of many stress management interventions (Meichenbaum and Cameron, 1983). Considerable evidence has accumulated showing that relaxation procedures can be useful in diminishing stress related symptoms such as chronic anxiety, sleep-onset insomnia, tension headache, migraine headache, and localised muscular tensions (Stoyva and Anderson, 1982). Various types of relaxation procedures have been developed. Some of the major ones include: progressive relaxation, autogenic training, electromyographic feedback, and meditation (Tolman and Rose, 1985). According to Tolman and Rose (1985), the technique of "progressive relaxation" developed by Jacobson (1938) is most widely used among therapists. This technique consists of teaching individuals to alternately tense and relax different muscle groups of the body in a systematic fashion. In this way the individual learns to be aware of feelings of tension and to substitute relaxed feelings for the tension (Jacobson, 1938).

"Self-control relaxation" is deemed to be a promising stress management procedure. This procedure emphasizes a number of applied relaxation coping skills including cue-controlled relaxation, relaxation tension, and deep breathing. Successful reduction of generalised anxiety have been documented in several populations (Tolman and Rose, 1985). According to Meichenbaum and Cameron (1983), in conducting relaxation training the rationale provided may be as important as the specific procedure employed. If it is emphasized that the client is acquiring a skill to be deployed in stressful situations, the client's sense of personal control may be enhanced.

In summary, adolescents constitute a group with whom it is notoriously difficult to intervene (Laufer, 1983). Group therapy has been found to be an effective mode of intervention with adolescents in general and disadvantaged adolescents in particular (Berkowitz and Sugar, 1975; MacClennan, 1968). The value of conducting groups within the school environment has been highlighted (Romano, 1988; Barcai and Robinson, 1969). In the following chapter, a school-based programme of intervention for adolescents under stress will be examined.

CHAPTER 7:
DEVELOPMENT OF AN INTERVENTION PROGRAMME

In the course of growing up, children throughout the world encounter a myriad of stresses. It is well documented in the literature that high levels of stress, if chronically sustained, may have morbid consequences for the growth and well-being of the individual (Dohrenwend and Dohrenwend, 1974; Compas, 1987a, 1987b). In an endeavour to alleviate some of these stresses, various methods of psychological and educational intervention have been devised (e.g. Allan and Anderson, 1986; Terr, 1989; Romano, 1988; Hains and Szyjakowski, 1990). "Community Oriented Preparation for Emergency" (Ayalon, 1987) constitutes one such approach. It forms the basis of the programme of intervention implemented in the present study and will be examined below. In addition, reasons for selecting this particular approach will be presented. Finally, the programme of intervention devised for the present study will be discussed.

7.1 COPE

Prompted by the psychological effects of the 1973 Yom Kippur War, a large-scale preventive-intervention programme called "Community Oriented Preparation for Emergency" (COPE) was developed at the University of Haifa School of Education in Israel (Ayalon, 1987). The programme was adapted by the Ministry of Education for dissemination in the Israeli educational system, giving priority to schools in border and development towns which are constantly under the threat of terrorist activity.

The COPE programme is designed to assist children and adolescents in coping with the stressful events of everyday life, as well as with emergencies caused by the disruption of social equilibrium and security. The programme comes in the form of a loose-leaf teacher's guide and resource book for group activities. Although designed for use by teachers within

the school system, it is constructed so as to be accessible to other professionals, as well as non- or para-professionals, who are concerned with the welfare of the youth (Ayalon, 1987).

COPE comprises of a structured handbook with open-ended suggestions for coping activities. The open-ended nature of the activities allows for maximum freedom of expression. Facilitators, whether teachers, parents, or substitutes, are guided by suggestions for implementing the various stress-reducing activities (Ayalon, 1983). The role of the facilitator is to encourage peer-group cohesion, provide relevant information, stimulate and guide various activities, and provide reassurance by means of physical proximity and empathy. The importance of rapport between the facilitator and the participants is underscored by Ayalon (1979) who asserts that it is central to the success of the programme.

A core ingredient of this approach is the emphasis on inter-personal communication within a social supportive network. All activities are thus performed in small peer groups and peer-group cohesion is encouraged throughout. According to Ayalon (1987, 1983), such groups foster mutual identification, a sense of shared fate, and open communication. The group serves as a sounding board for better self-observation and understanding. In addition, norms created within the group serve as anchors for assessing confused reality. Further, the group is used to produce alternative solutions to complicated challenges that may exceed individual capacity. Finally, as a symbolic representation of the primary maternal protection (Winnicott, 1971; Mahler, 1963), the group serves to satisfy increased dependency needs that manifest in times of stress (see section 6.1).

The fundamental aim of the programme is to encourage mastery through active coping. Activity is widely regarded in the stress coping literature as an adaptive and appropriate behaviour under stress (Monat and Lazarus, 1977; Matheny *et al.*, 1986). According to Ayalon (1983), activity contributes to a clearer evaluation of stressful situations, tapping the youths' potential adaptive resources. By way of various strategies, **COPE** offers ample opportunity for children and adolescents to develop an active attitude towards stress; either as a direct attempt at reducing the stressor or using activity as a palliative device for periods of possible confinement (Ayalon, 1983).

"Stress is alleviated by channelling the children's energies toward gaining more control over their environment, facilitating expression and communication of fears and worries, helping them find support and muster courage, that will turn them from passive victims into active modifiers of their own lives" (Ayalon, 1987, p.3).

COPE provides a variety of tools to achieve its goals. These are:

- *Stories and poems; to stimulate discussion of personal experiences.
- *Free writing; to stimulate the imagination as a means of achieving self-awareness and wish-fulfilment.
- *Role-Play; to assist in the solving of inter-personal and intra-psychic conflicts.
- *Simulation Games; to provide training opportunities for coping in unexpected situations.
- *Drawing, Painting and Movement; to provide non-verbal modes of expression for the release of accumulated and acute tensions.

In addition, a special section providing methods for coping with bereavement and death is included.

The abovementioned strategies employ the language of play and fantasy, creative and communicative expressions, to nurture one's ability to cope with previous difficulties and unforseen stress. Children and adolescents are encouraged to work through their feelings using various activities and modes of expression. The focus of training is on the ventilation of emotion (either by talking, drawing, or re-enacting), the development of cognitive coping skills (such as, problem-solving skills and reinforcing self statements), and the prompting of specific behavioral skills (such as assertiveness and relaxation).

The techniques offered by the programme are varied, flexible and amenable to change by the programme leader. The programme can thus be tailored to meet the needs of different communities in varied settings, and adapted easily to different age groups (Lahad and Cohen, 1981). In addition, **COPE** has broad applicability across situations of stress. It may be implemented as an anticipatory prevention programme, as a crisis intervention programme during a crisis, or as a post-crisis intervention programme (Ayalon, 1987). Suggestions for sessions encompass expressive, as well as cognitive and behavioral methods of coping. Subsumed under expressive modes are: free writing, bibliotherapy, movement and non-verbal communication, dramatic play and psychodrama, and simulation games. Subsumed under cognitive and behavioral methods are: assertiveness training, rational-emotive therapy, stress-inoculation training, problem-solving training and relaxation training. All constitute widely used stress management techniques (Dobson, 1988). It is proposed by the writer that the techniques outlined in **COPE** may serve as both problem- and emotion-focused modes of coping, depending upon the circumstances under which they are employed.

According to Ayalon (1983), **COPE** is consistent with the basic three-phase "stress inoculation" paradigm proposed by Cameron and Meichenbaum (1982). According to this model of the process of cognitive-behavioral coping skills training, the process of change is conceptualised as consisting of three phases: a conceptualisation phase, a skill acquisition and activation phase, and a rehearsal and application phase (Cameron and Meichenbaum, 1982; Meichenbaum and Cameron, 1983; Meichenbaum and Jaremko, 1983). In practice the three phases blend together so that the model really serves as an heuristic device. Consistent with the stress inoculation procedure, **COPE** programmes comprise an initial stage in which a conceptual framework of stress and coping is offered, followed by a stage of identification of social skills, and finally a stage focusing on the application and training of coping skills within a supportive atmosphere (Ayalon, 1983).

An affinity between the transactional model of stress and the stress inoculation approach has been attested to (Meichenbaum and Cameron, 1983; Meichenbaum and Jaremko, 1983). Stress inoculation treatment procedures are designed to facilitate adaptive appraisals (conceptualisation phase), to enhance the repertoire of coping responses (skills acquisition and rehearsal phase) and to nurture the individual's confidence in and utilisation of his or her coping abilities (application and follow through phase). As **COPE** has been identified as

being consistent with the stress inoculation paradigm, it follows logically that it too has an affinity with the transactional model of stress adopted for the purposes of this study. Consistent with the Lazarus and Folkman (1984, 1987) conceptualisation of stress, the programme may be seen to offer both problem-focused as well as emotion-focused modes of coping.

The school is perceived by Ayalon (1987) to be an appropriate setting for conducting stress prevention and intervention as it encompasses vital peer-group interaction and the presence of qualified adults in an educational framework (see section 6.1). In terms of broader community planning, Ayalon (1979) suggests that each school, or group of adjacent schools, should create a support system staff. The staff would be headed by a school counsellor, who would receive special training in emergency education and then prepare the entire teaching staff to use COPE techniques. The importance of including parents, both as part of the support teams and as resource people to acquaint the school staff with the ethnic or religious coping patterns that children learn at home, is highlighted.

The COPE programme has been used as a crisis intervention in the following instances: Death in the family, separation and divorce, illness, surgery and physical handicaps, terrorist attacks against civilians (Ayalon, 1983; Lahad and Cohen, 1981). Ayalon (1979, 1983) argues strongly for the implementation of systematic stress prevention programmes in schools and communities threatened by unpredictable violence in order to enhance adaptive coping behaviour when times of crisis and emergency arise.

7.2 Reasons for Selecting COPE

It is proposed by the writer that within the South African context, the implementation of an intervention programme modelled upon COPE (Ayalon, 1987) is particulary viable. Reasons for this proposition are as follows:

Having been designed for use within the school system, the programme may be implemented during a regular school day, thereby avoiding the complicated task of organising a venue and time that will suit everybody. When communities are stressed beyond their capacity, support systems typically break down. In these instances the peer group assumes increased importance in the socialisation process (Ayalon, 1987; Chikane, 1986). By actively encouraging peer group support, COPE capitalizes upon this natural process. There is no great cost involved in implementing COPE or a programme based upon it. Facilitators do not have to acquire prescribed materials but simply need to use what they have at their disposal. With economic issues lying at the core of much of the stress experienced by disadvantaged communities, the importance of this aspect of the programme should not be underestimated. The techniques outlined in COPE are flexible and may be specifically adapted to the needs of a situation or a community. In addition, COPE may be implemented in preparation for a stressful event, during a crisis situation, or in the aftermath of a crisis. With South Africa being a heterogenous society in the throes of rapid social change, such flexibility is essential. The ideas presented in the COPE handbook are creative and enjoyable and therefore likely to stimulate the interest of a wide range of youth. By taking the position that everyone has the potential for growth and the right to personal maximisation of competence to deal with stress (Ayalon, 1987), COPE resonates with the notion of empowerment within the community psychology movement (Perkel, 1988). Finally it is asserted that, within the South African context, the most important aspect of the programme is that no previous professional qualification is required. The programme may therefore allow for a far greater number of youth to receive much needed intervention. The need to develop innovative ways of reaching more people has been underscored by Freeman (1991).

7.3 The Intervention Programme Modelled upon COPE

The psychologically-based intervention programme implemented by the writer at Coronationville Secondary School is based upon the ideas and activities set out in COPE (Ayalon, 1987). In devising the intervention programme, the writer adapted stories and activities from COPE to suit the needs of the sample under investigation. On several occasions, stories taken from local and other sources were used. Woven into the above were ideas introduced by the writer which were stimulated by the content of COPE.

As it stands, COPE does not contain detailed session plans. It simply contains structured suggestions for coping activities using emotional (or expressive), behavioral or cognitive modalities. It was felt by the writer that detailed session plans for the intervention programme should be drawn up. The idea was to use these session plans as a framework and to adapt them according to what emerged in the course of the programme (see Appendix 1 for session plans). According to Malan's (1963) treatise on brief psychotherapy, therapeutic results can be obtained in ten to forty sessions. An intervention of ten sessions was devised so as to fit in with the length of the school term. The content of the intervention was tailored so as to address the central concerns and issues of the participants in the study. These central issues were generated by the adolescents themselves.

In a broad sense, Meichenbaum and Cameron's (1983) stress inoculation paradigm was used as a framework in drawing up the sessions for the intervention programme. The sessions tend to progress through a **conceptualisation phase**, in which issues pertaining to the particular session are elicited and clarified. This phase is followed by a **skill acquisition phase** in which the writer trains the children in, or rather exposes them to, certain coping skills. Finally, each session involves the **rehearsal and application** of the learned skill/ activity; either within the session itself or both within the session and applied to real situations in the environment. The value of rehearsal within the session lies in the fact that coping management is greatly enhanced by the opportunity to observe others performing positive coping responses (Meichenbaum, 1977). The sessions are designed so that skills learned in one session are carried over and integrated into later sessions.

In order to encourage peer-group cohesion and support, all the sessions contain activities that are group orientated. Although the sessions have different emphases, an attempt is made to include affective, cognitive, and behavioral aspects in all sessions. The programme is designed so that the initial meetings focus upon the expression of feeling and the achievement of catharsis by way of "expressive modes" of therapy. Later sessions focus upon the acquisition of cognitive and behavioral coping techniques. All therapeutic techniques are implemented in as creative a manner as possible; that is, by way of stories, visualisation, role-play and so on. Each session requires the use of inventive imagination on the part of

the participants. In accordance with Ayalon's (1987) views, emphasis is on the creative process rather than on the finished product. The programme begins with expressive modes of therapy so as to heighten rapport between the therapist and the participants, as well as to foster group intimacy and cohesion. In addition, these modes are employed to enhance self-disclosure and acceptance of feelings and experience (see section 6.2.1). The sessions are graded so that initially the youths only have to identify with fictional characters in a story. The stimuli gradually become more immediate, so that the youths are eventually required to deal with personal problems encountered on a daily basis. This graded exposure to stressors is in keeping with major theoretical positions in the field (Meichenbaum and Cameron, 1983; Janis, 1983). Relaxation training is introduced in the second session, and is maintained throughout the programme. It has been stressed in the literature that practice is essential in being able to effectively use relaxation as a coping technique (Meichenbaum and Cameron, 1983; Stoyva and Anderson, 1982). In addition to a relaxation exercise, each session begins with a warm-up exercise in order to orientate the children to the session to follow. From the first session through to the final session, the implicit and explicit message conveyed to the children is that they are capable of exercising control in stressful situations. The importance of conveying this message in stress-management programmes is noted by Janis (1983). In order to assist the adolescents in integrating their experience in the programme, the penultimate session includes written feedback on what they feel they have gained from participating in the intervention. In order to achieve a sense of closure, the final session includes a pictorial representation of the subjects' experiences in the intervention programme.

In summary, the intervention programme developed for the purposes of the present study integrates a variety of well established affective, cognitive and behavioral techniques within the context of peer-group support. These techniques are employed in a creative way so as to facilitate the learning of coping skills and to heighten the participants' enjoyment of the programme. The importance of an integrative, multimodal approach to stress-management has been highlighted in the literature (Lazarus, 1971, 1976; Keat, 1979; Tolman and Rose, 1985; Meichenbaum, 1977). The programme aims to equip the children with a wide repertoire of problem- and emotion-focused coping tools that will render them more resilient to stress, thereby reducing adverse psychological sequelae. As noted by several authors in the stress-coping field, a broad and flexible coping repertoire is most important in order to adaptively cope with stress (Lazarus and Folkman, 1987; Pearlin and Schooler,

1978; Billings and Moos, 1981). The programme, by providing the opportunity for practice within a supportive environment, aims also to enhance the adolescents' sense of personal adequacy. (See Appendix 2 for brief process notes on the intervention programme).

In the following chapter, the methodology employed in order to evaluate the intervention programme implemented at Coronationville Secondary School is presented.

CHAPTER 8: METHODOLOGY

In the preceding chapter the programme of intervention devised for the present study was discussed. In this chapter the subjects, instruments, and procedure employed in order to evaluate the efficacy of this intervention programme are described.

8.1 Subjects

The sample investigated comprised twenty-four high school students drawn from Coronationsville Secondary School in Coronationville, a Coloured township on the western fringe of Johannesburg. This school was selected as the target for intervention as it draws youths from working class backgrounds that are characterised by poverty, unemployment, substance abuse, violence and broken homes. Such factors, which typically occur in low socio-economic status populations, are considered in the literature to lead to psychological and physical stress (Dohrenwend, 1990; Wills and Lagner, 1981). In addition, the youths attending the school encounter social, political and economic discrimination on a daily basis. The negative impact of discrimination upon self-esteem and self-confidence has been documented in the literature (Masterpasqua, 1989; Vogelman, 1986). It was felt that these youths would greatly benefit from a psychologically-based intervention programme. It was hoped that by teaching them coping skills they would be better equipped to deal with the stresses that characterise their daily lives. Early adolescence has been isolated as the most crucial stage in the adolescent process as a whole (Blos, 1971, 1979; Petersen and Hamburg, 1986). For this reason, the subjects selected for the present study were adolescents in the early stage of their adolescent development.

Demographic information about the sample was obtained by way of a biographical questionnaire (see Appendix 7). The subjects ranged in age from 12 years to 14 years. The mean age for the sample was 13.42 years (SD = 0.58 years). With respect to the sex of the subjects, 50% were male and 50% were female. The subjects in the sample were all in Standard Six. The adolescents in the sample resided in various areas, the greater majority of these areas

being Coloured townships. The homes of the majority of the subjects were located in two areas; namely, Westbury (33%) and Newclare (29%). With respect to type of dwelling, 63% of the sample resided in houses, while 38% resided in flats. All dwellings had hot and cold water, electricity, and inside toilet facilities. The majority of the subjects (58%) lived in an extended family setting, variously comprising of cousins, uncles and aunts, and grandparents. In certain homes, borders and family friends formed part of the household. Subjects' home language varied with 54% of the sample speaking both English and Afrikaans, 38% speaking only English, and 8% speaking English together with another language. With regard to the marital status of the subjects' parents, 33% of the sample had parents who were married, 33% came from broken homes, 21% had parents who were never married, and 13% had lost a parent through death. With respect to the educational status of the subjects' fathers, only 9% were university graduates, the majority of fathers (41%) having only a matriculation exemption. As regards the mothers of the sample, only 8% were university graduates, the majority of them only having passed Standard 8. In terms of occupational status, 50% of the fathers were employed as manual skilled workers or in lesser clerical and administrative occupations; 46% of the mothers were employed in skilled clerical, sales, or administrative occupations. With regard to unemployment, 5% of the fathers and 8% of the mothers were unemployed.

8.2 Structured Instruments

Three structured measures were employed in the present study. These will be examined below.

8.2.1 The Beck Depression Inventory (Beck *et al.*, 1961)

The Beck Depression Inventory (BDI) is an instrument designed to measure the presence and degree of depression. It was originally developed for use with adults and late adolescent patients. However, later research indicates that the BDI is appropriate for use with young adolescents, as young as 12 years, 10 months (Strober, Green and Carlson, 1981).

The BDI comprises twenty-one items presented in a multiple choice format. Each item corresponds to a specific category of depressive symptom and/or attitude (see Appendix 3). These symptoms or attitudes are consistent with descriptions of depression included in the psychiatric literature (Beck, 1970). Each category describes a particular behavioral manifestation of depression and consists of a graded series of four self-evaluative statements. In order to reflect the range of severity of the symptom from neutral to maximum severity, the statements are rank ordered and weighted. To indicate degree of severity, each statement is assigned a numerical value of zero, one, two, or three (see Appendix 4). A short form of the inventory has been developed (Reynolds and Gould, 1981) which consists of thirteen items taken from the revised twenty-one item test.

The score for the inventory is obtained by adding the highest score circled for each item. Interpretation is based upon objective scoring. The following guidelines are provided for scoring:

- 0-9 Normal Range
- 10-15 Mild Depression
- 16-19 Mild-Moderate Depression
- 20-29 Moderate-Severe Depression
- 30-63 Severe Depression

It should be noted that the authors admit that there is no arbitrary score that can be utilised as a cutoff score for all purposes. The specific cutoff point depends upon the characteristics of those completing the inventory and the purpose for which the inventory is being used (Beck *et al.*, 1961).

As a test for depression, the BDI has several advantages. It is easy to administer, easy to score and interpret. It is also simple to complete. The reading difficulty level is quite low (eighth grade or standard six), the statements are easy to understand, the directions are very clear, and responses are indicated directly on the question sheet. In addition, it may be individually or group administered (Stehouwer, 1984). It was due to these qualities of the

measure, and the fact that it is widely employed in the literature, that the BDI was selected as the measure of depression for this study.

Test-retest reliability and internal consistency estimates have been found to be 0.90 and 0.86 respectively. Validity studies have indicated strong support for the BDI as a useful means of assessing depression. The BDI correlated 0.77 with psychiatric ratings of depression and correlated 0.75 with the Depression Scale of the Minnesota Multiphasic Personality Inventory (Beck, 1970; Stehouwer, 1984). Overall, with a variety of subjects in a variety of situations, reliability and validity studies strongly support the BDI as a useful measure for assessing depression (Stehouwer, 1984). According to Stehouwer (1984), the BDI seems to be the inventory of choice for the practitioner who requires an uncomplicated, quick and helpful tool in order to determine the presence and degree of depression in clinical patients or research subjects.

8.2.2 The State-Trait Anxiety Inventory-Form Y (Spielberger et al., 1983).

Anxiety has traditionally been viewed as having two different forms; namely, "state" and "trait" forms. The transitory feelings of worry or fear that most people experience from time to time constitute the "state" form of anxiety. The relatively stable tendency of an individual to respond anxiously to a stressful situation constitutes the "trait" form of anxiety (Spielberger *et al.*, 1983). Although the STAI was designed for adults, high school and college students, the test can also be used with junior high school students as all the items are below the sixth-grade (or standard four) reading level (Chaplin, 1984). In the present study, Form Y of the STAI was employed. This version is considered to be an improvement upon the original form of the test; that is, Form X (Spielberger *et al.*, 1983).

The STAI is a forty item measure that taps a person's level of both state and trait anxiety. The STAI comprises a single page with the State-Anxiety scale on one side and the Trait-Anxiety scale on the other. The twenty State-Anxiety scale items are rated on a four-point intensity scale. The scale is labelled as follows: "Not at All", "Somewhat", "Moderately So", and "Very Much So". Subjects are instructed to indicate how they are

feeling "right now", and to blacken-in the circle which surrounds the appropriate response number. The twenty Trait-Anxiety scale items are rated on a four-point frequency scale. The scale is labelled: "Almost Never", "Sometimes", "Often", and "Almost Always". On this scale the respondents are instructed to indicate how they "generally" feel (see Appendix 5). The STAI is a self-administered test and it may be given either individually or in groups. There is no time limit to this test. The State-Anxiety Scale is always administered first, since this measure is sensitive to testing conditions.

As with administering the STAI, the scoring of the test is straightforward. Each scale is scored separately. The subjects' responses to the twenty items on the scales are summed. Certain items need to be reversed before they are summed. A template is provided with the manual for the test in order to facilitate scoring. The score obtained reflects the subjects' level of anxiety for the particular scale in question. Scores on both scales range from 20 to 80, with higher scores indicating higher levels of anxiety.

Internal consistency estimates range from 0.86 to 0.95. With respect to stability estimates, the Trait-Anxiety scale ranges from 0.65 to 0.86 and the State-Anxiety scale from 0.16 to 0.62. Validity scores for the Trait scale were calculated by correlating it with the IPAT Anxiety Scale, the Affect Adjective Checklist and the Manifest Anxiety Scale. Correlations were 0.75, 0.52, and 0.80 respectively (Chaplin, 1984).

The STAI has been extensively used in research and clinical practice (Chaplin, 1984; Spielberger, 1983). A comprehensive bibliography of these clinical and research contexts has been drawn up by Spielberger (1989). Of particular relevance to the present study, the STAI has been used to assess the immediate and longterm changes in anxiety as a function of psychotherapy; stress management; counselling; and cognitive and behavioral treatment studies (Spielberger *et al.*, 1983). According to Spielberger (Spielberger, 1989), the STAI has been used more frequently in research than any other anxiety measure.

The STAI was selected as the measure of anxiety for the present study for the following reasons: its straightforward administration and scoring, its sound reliability and validity scores, and its widely accepted usage in the literature.

8.2.3 The Self-Perception Profile for Children (Harter, 1985)

The Self-Perception Profile for Children (SPPC) represents a revision of the earlier Perceived Competence Scale for Children (Harter, 1982). The original measure was constructed in order to evaluate children's "domain-specific" judgements of their competence as well as their global perception of their self-worth. In addition to global self-worth, the original scale tapped three competence domains. The separate scores yielded by these four subscales made possible the examination of a profile of the child's evaluative judgements. The revised version of the scale contains two additional subscales. The SPPC thus contains six separate subscales which tap five specific domains, as well as global self-worth. The five specific domains include: scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct. Each of the subscales contains six items so that the scale comprises thirty-six items in total. The scale may be administered in individual as well as in group settings. The emphasis of the current instrument is upon self-adequacy, hence the change in the name of the measure (Harter, 1985).

The original scale was developed on the assumption that an instrument providing separate measures of one's perceived competence in different spheres, with an independent assessment of global self-worth, would provide an enriched and more accurate picture than those measures which typically provide only a single self-concept score. The model underlying the construction of the scale postulates that children do not feel equally competent in every skill domain (Harter, 1982). The above assumptions hold for the present instrument. With the revised measure, as with the original one, it is possible to explore the relationship between global self-worth and the domain-specific perceptions of competence.

With respect to question format, the SPPC employs a "structured alternative format" (see Appendix 6) in order to offset the tendency to give socially desirable answers as well as to provide the respondents with more latitude to qualify their answers (Harter, 1982, 1985).

The respondents are carefully instructed on how to answer the various questions. Each item is scored on a scale from one to four, with higher scores reflecting higher perceived competence. The manual to the measure provides a detailed scoring key.

The manual for the SPPC (Harter, 1985) cites acceptable internal consistency reliabilities for all six subscales which fall between 0.80 and 0.86 for children in the eighth grade, or standard six. The majority of standard deviations fall between 0.50 and 0.85. This indicates considerable variation among individuals. Validity scores are not provided in the manual for the measure. However, Harter is a well known and recognised researcher in the field of child development. In addition, the earlier form of the present scale was found to be both reliable and valid (Harter, 1982).

As it constitutes an improvement upon those measures which yield a single self-concept score (Harter, 1985, 1982), the SPPC was selected as the measure for competence or adequacy.

8.2.4 Biographical Questionnaire

A brief questionnaire was constructed for the purposes of this dissertation. It was drawn up in order to ascertain the subjects': age, home area, living conditions, presence of extended family, and the marital and educational status of the subjects' parents (see Appendix 7).

8.3 Qualitative Measures

The most commonly employed approach to defining stressful events in adolescence, structured life event schedules, has several limitations. Such schedules typically capture adult-defined and non-normative life experiences. Most measures cover acute life events and overlook chronic and daily events, while measures which cover both acute and chronic

stressors do not distinguish between them (Daniels and Moos, 1990). As a result, the stressful events more commonly encountered by the adolescent may be neglected. In addition, the forced choice format of life event schedules precludes examination of those events that adolescents spontaneously define as problematic in their current life experience (Stark, Spirito, Williams and Guevremont, 1989). Further, the psychometric properties of these measures are generally inadequate or unknown (Compas, 1987b). According to Compas (1987b), research concerning child and adolescent stress has been hindered because of the shortcomings of these measures. It was for these reasons that qualitative measures were employed in the present study to gain insight into the stresses that characterize the lives of Coloured adolescents. The qualitative measures employed do not constitute standard projective tests. Standard projective tests are culturally biased and therefore inappropriate in the context of research within the Coloured community. In addition, the writer was interested not in the childrens' unconscious but rather in the practical day-to-day realities of their existence. As a result, the focus of standard projective techniques offered an emphasis which was unsuitable for the purposes of this study.

8.3.1 Essay One

Before the intervention began, subjects were requested to complete an essay on the following topic: "Things in my daily life that are hard for me, that make me unhappy and that I find difficult to manage...". This essay was given in order to elicit from the children what they were struggling with on a daily basis. The importance of identifying stresses relevant to the population under investigation has been underscored by Genevay and Simon-Gruen (1979). Essays have been used effectively to gain insight into children's experiences and stressors in a variety of contexts (Allan and Anderson, 1986; Brown, O'Keeffe, Sanders, and Baker, 1986; Pennebraker, Colder, and Sharp, 1990; Wenz and McWhirter, 1990). In the present study the essay was administered in order to ensure that the intervention was tailored to the needs of the sample under investigation. The essay topic was purposefully kept open ended so that the adolescents did not feel pressurised into giving a specific answer.

8.3.2 Drawing

As with essays, drawings have been used successfully with children under stress in order to gain access to perceptions and responses to such events (Terr, 1989; Allan and Anderson,

1986). In order to obtain a representation of how the adolescents in the present study perceive their environment, they were provided with paper and wax crayons and asked to draw a picture from the following stimulus: "What's happening in the place where I live?". As with the essay, the drawing was administered in order to correctly devise the content of the intervention.

8.3.3 Essay Two

On completion of the intervention programme, the adolescents in the experimental group were presented with the following essay topic: "What I have gained and learnt from this experience". This essay was given in order to gauge their subjective evaluation of the intervention. The participants were asked to indicate what they had found to be most helpful and what they felt could be changed in order to improve their experience. It was felt by the author that this feedback would complement the data generated by the structured measures employed. In addition such feedback would contribute important information in terms of revising the intervention for future use.

8.4 Procedure

The nature and purpose of the present study was briefly described to all the Standard Sixes by the headmaster of Coronationville Secondary School. A letter requesting informed consent for participation in the study was then randomly distributed to the parents of approximately sixty English speaking children in Standard Six (see Appendix 8). As the first language of the writer is English, it was requested that those children receiving letters be proficient in English. Of the letters distributed, forty were returned with parental consent.

A classical, fully randomised, two-group design was employed in this study in order to ensure that known or unknown extraneous variables would not systematically bias the results of

the study, as well as to control for between group differences (Christensen, 1980). Initially, sixteen males and sixteen females, between the ages of 12,5 and 13,5, were randomly selected from those forty in the standard six group whose parents provided the requisite consent. Standardisation of age was important in terms of ensuring, as far as possible, that the adolescents participating in the study were at a similar point in their affective and cognitive development. The subjects were randomly assigned to either an experimental or control group, with eight males and eight females in each group. The sample was thus equalised for sex, age and standard. It should be noted that the number of participants was later reduced to twelve of each sex as certain children did not attend the pre-testing session or the session where the first essay and drawing were completed. There were, therefore, only six males and six females in each group.

All work with the sample took place on school premises after school hours. The writer met with the adolescents a total of 15 times. The first meeting, which was an orientation meeting, took place towards the end of the second school term. This meeting was used to introduce the writer and the nature and purpose of the study to all the participants, as well as to outline what their commitment to the intervention programme would entail. At the next meeting all subjects were pre-tested on the BDI, the STAI, and the SPPC to obtain a base-line measure of the degree to which they were stressed. Pre-testing took place approximately two weeks before the commencement of school examinations. At the third meeting, the first essay and the drawing were completed by all. A number of group exercises were conducted in an attempt to foster rapport between the writer and the adolescents. A seven week interval followed, necessitated by school examinations and the July school holidays. The writer intentionally did not wait for the beginning of the third school term to commence work as the length of this term, excluding exams, would have been too short to accommodate fifteen meetings.

At the beginning of the third school term, a number of group exercises were conducted in an attempt to build rapport with and foster group cohesion among the children involved in the study. In addition, all the subjects completed a biographical questionnaire. At the close of the session the subjects were allocated to one of two groups, one being experimental and the other, control. It must be noted that the children were unaware of the group to which they had been assigned. The sessions ran twice weekly for an hour and fifteen minutes over

a five week period. In their penultimate session, the experimental group completed a second essay to gauge their subjective experience of the intervention.

The writer worked with the experimental group and a qualified high school teacher worked with the control group. The experimental group received ten sessions of therapeutic intervention, while the control group received syllabus orientated input. The teacher who worked with the control group was a warm and engaging individual who did not carry the youths interactions through in a therapeutically based way. She conducted various school-related exercises with the youths, some of which involved group work. No interpretations of the children's interactions were made. A typical cognitive, school orientated approach was adopted with the adolescents in the control group.

Following the intervention, all subjects were post-tested on the BDI, STAI and SPPC in order to ascertain whether intervention had influenced performance on these measures. As with the pre-testing, post-testing took place approximately two weeks before the commencement of school examinations. There was a three month gap between pre- and post-testing. The work at the school was drawn to a close with a party for all the children who participated in the study. It should be noted that there is an agreement between the writer and the school that, at a mutually convenient time, the subjects in the control group will receive intervention equivalent to that received by the experimental group.

8.5 Data Analyses

In accordance with the stated aims and hypotheses of the present study, the data was analyzed in the following manner:

1) In order to describe the sample, descriptive statistics were computed on continuous and categorical variables; that is, on age and demographic details of the sample respectively.

2) The essays, drawings, and feedback completed by the subjects were evaluated by two independent raters. Both raters were clinical psychologists who as a result of their training were qualified to interpret projective data. Central themes were independently isolated and then classified into general categories.

3) The technique of Analysis of Variance (ANOVA) was employed to compare pre-test scores of the experimental and control groups as well as the post-test scores of these two groups. Repeated Measures ANOVA was used to compare the pre-test post-test change scores of the two groups. Means and standard deviations were taken into account in all interpretations of the results of the ANOVA tables. In addition, the pre-test post-test changes for the experimental and control groups were thoroughly investigated via the examination of line charts showing changes from pre- to post-test for each subject in the two groups. Analysis of Covariance was not considered to be an appropriate method for controlling pre-treatment differences between the experimental and control groups owing to the different distributions of pre-test scores of the two groups. The relationship between the pre- and post-test scores in the experimental and control groups would have yielded regression lines with different slopes necessitating an extremely complex interpretation of the Analysis of Covariance technique (Harris, 1963). The complexity of such an Analysis of Covariance was considered beyond the scope of this study. Thus the ANOVAS were repeated for the experimental and control groups omitting extreme scorers on the pre-test who may have rendered the groups non-comparable. The rationale underlying this further analysis is explained in detail in Chapter 9. The above analyses were computed using SAS (1985).

4) As a final validation of the measures employed to investigate the hypotheses, the Binomial Test was used to examine the number of subjects in each group whose scores changed in the hypothesized directions.

In this chapter, the methodology employed in the present study was discussed. The results of the study are presented in the following chapter.

CHAPTER 9:
RESULTS

The results of the present study are presented in three sections. Section one comprises a description of the sample in terms of psychological sequelae of stress, as well as on essay and drawing themes. In the second section, summary results of the Analyses of Variance and the Binomial Test are presented together with line charts illustrating changes from pre-test to post-test for each subject of the experimental and control groups. The third and final section describes the feedback provided by the subjects in the experimental group on the therapeutic intervention that they received.

9.1 Description of the Sample on Psychological Sequelae, Essays, and Drawings

9.1.1 Means and Standard Deviations for the Pre-Tests of the Measures Employed

In Table 9.1, the minimum and maximum scores, means, and standard deviations for the sample on the pre-test measures of the BDI, STAI, and SPPC subscales are presented. As shown in Table 9.1, the mean for the BDI pre-test is 17.04, the standard deviation is 10.63. The minimum score is 4 and the maximum, 45.

On the State-Anxiety Scale, the mean for the pre-test is 41.92. The standard deviation is 11.89. The lowest score obtained is 25; the highest is 67. On the Trait-Anxiety Scale the mean for the pre-test is 44.92; the standard deviation is 9.43. The lowest score is 30; the highest score is 65.

The subjects' performance on the SPPC subscales is as follows: On the Scholastic Competence Subscale (SPPC 1), the mean for the pre-test is 2.51; the standard deviation is 0.81. The minimum score is 1.00 and the maximum score is 3.67. On the Social Acceptance Subscale (SPPC 2) the mean for the pre-test is 2.40, the standard deviation is 0.71. The minimum score is 1.00 and the maximum score is 3.67. On the Athletic Competence Subscale (SPPC 3), the mean for the pre-test is 2.17. The standard deviation is 0.58. The minimum score is 1.00 and the maximum score is 3.50. On the Physical Appearance Sub-scale (SPPC 4), the mean for the pre-test is 2.56; the standard deviation is 0.92. The minimum score is 1.00 and the maximum score is 3.83. On the Behavioral Conduct Subscale (SPPC 5), the mean for the pre-test is 2.66; the standard deviation is 0.70. The minimum score is 1.33 and the maximum score is 3.67. Finally, on the Global Self-Worth Subscale (SPPC 6), the mean of the sample for the pre-test is 2.72; the standard deviation is 0.59. The minimum score is 1.50 and the maximum score is 3.83.

Table 9.1

Means, Standard Deviations, Minimum and Maximum Scores of the Sample on the Pre-Tests of the Measures Employed

Test	Minimum Score	Maximum Score	Mean	SD
BDI	4	45	17.04	10.63
State-Anxiety	25	67	41.92	1 .89
Trait-Anxiety	30	65	44.92	9.43
SPPC 1	1.00	3.67	2.51	0.81
2	1.00	3.67	2.40	0.71
3	1.00	3.50	2.17	0.58
4	1.00	3.83	2.56	0.92
5	1.33	3.67	2.66	0.70
6	1.50	3.83	2.72	0.59

9.1.2 Daily stresses and Perception of the Environment

i) Daily stresses

The information yielded by the essays is presented in two sections. In the first section, categories of daily stress are presented. The second section deals with the emotions associated with these daily stresses (see Appendix 10 for examples of essays).

a. Categories of Daily Stresses on Entire Sample

All the subjects (N=24) completed an essay on the following topic: "Things in my daily life that are hard for me, that make me unhappy and that I find difficult to manage...". These essays were examined with a view to identifying what the sample is struggling with on a daily basis. Categories of problems were derived by reviewing the individual responses of the subjects and then classifying the central themes into general categories. Six central categories or themes emerged. The essays were rated on these categories by two independent raters. Table 9.2 presents these categories together with the frequency and percentage of the entire sample reporting them.

As can be seen from Table 9.2, the most frequently reported problem is school-related difficulties, mentioned by 50% of the sample. Thirty-three percent of the sample report problems with parents. Issues with peers are reported by 19% of the sample. In decreasing order of frequency, marital problems of parents (15%), family problems (14%), and physical and/or sexual abuse (8%) are reported as problems encountered by the sample on a daily basis.

Table 9.2

Frequencies and Percentages of Subjects whose Essays Reflect Specific Problems

Problem Area	f N=24	%
Marital Problems (conflict; divorce)	7	15
Conflict with Parents (communication difficulties and conflict with parents)	8	33
Family Problems (financial difficulties; alcoholism; lack of support; sibling rivalry)	13	14
Abuse (physical; sexual)	4	8
School Difficulties (over-disciplining; work related problems)	24	50
Peer Issues (conflict; pressure; sexuality)	14	19

b) Emotions Associated with Daily Problems

An examination of the subjects' essays revealed certain negative emotions surrounding the problems that they confront on a daily basis. Table 9.3 reflects these emotions and the percentage of subjects reporting them. Anxiety is reported by 50% of the sample. The essays of 19% of the sample reflect depressive themes.

Table 9.3

Frequencies and Percentages of Subjects who Reported Negative Emotions in Connection with Daily Stresses.

Emotions	f N=24	%
Anxiety	12	50
Depressive themes (depression, suicidal ideation, lack of self-worth)	14	19

ii) Perception of the Environment

a. Specific Environmental Features

All the subjects in the present study were asked to complete a drawing from the following stimulus: "What's happening in the place where I live?". The purpose of the drawing was to obtain insight into how the sample perceive their environment (see Appendix 10 for examples of drawings). As with the essay, categories of environmental features were derived by reviewing the individual drawings of the subjects and then classifying the central themes into general categories. Five general categories emerged. The drawing were evaluated by two independent raters. In Table 9.4 these categories are presented, together with the frequency and percentage of subjects reporting them.

As reflected in the table, 71% of the sample report violence as a feature of their environment. Drug abuse and disadvantage are cited by 29% of the sample respectively. Alcohol abuse and rape are each reported as features of the environment by 13% of the sample.

Table 9.4

Frequencies and Percentages of Subjects Whose Drawings Reflected Specific Environmental Features

Drawing Themes	f (N=24)	%
Drug Abuse	7	29
Alcohol Abuse	3	13
Violence	17	71
Rape	3	13
Disadvantage	7	29

b. Emotional Response to Features of the Environment

An evaluation of the individual drawings of the subjects highlighted certain emotions. The results presented in Table 9.5 show that the drawings of 63% of the sample display features of anxiety. Indications of contentment with the environment are reflected in the drawings of 29% of the sample.

Table 9.5

Frequencies and Percentages of Subjects Displaying an Emotional Response to Features of the Physical Environment

Emotions	Frequency N=24	Percent
Anxiety	15	63
Contentment	7	29

9.2 Results of the Analyses of Variance and the Binomial Test Presented Together With Line Charts

In this section, reference is frequently made to tables and figures. For the ease of reference these tables and figures are cardinally numbered and placed at the end of the section. Results based on the original sample size are presented first, followed by results based upon modified sample sizes.

9.2.1 Results Based on the Original Sample Size

From Table 9.7 (i) it can be seen that the experimental and control groups are significantly different on the pre-test BDI scores ($F = 5.66$, $df = 1;22$, p). As is evident from the means presented in Table 9.6, the scores of the experimental group are significantly higher than those of the control group on this measure. There is no significant difference between the two groups on the post-test BDI scores ($F = 0.80$, $df = 1;22$, p0.05). However, an examination of the pre- and post-test BDI means of the experimental and control groups (see Table 9.6) reveals that the post-test mean for the experimental group is markedly lower than the pre-test mean for this group on the BDI. In contrast, the mean post-test score for the control group is slightly higher than the pre-test mean for this group. As reflected in Table 9.7 (ii), the interaction effect of the change by group is significant ($F = 17.23$, $df = 1;22$, p). This significant interaction effect is clearly evident from Figure 1 and implies that the changes from pre- to post-test scores are different for the two groups. From Figure 1 it can be seen that all the subjects in the experimental group show a decrease in their scores from pre- to post-test on the BDI, whereas only two subjects in the control group show a decrease in their scores. The relative frequency of subjects whose pre-test post-test changes are in the hypothesized directions are noted for the original and modified experimental and control groups in Table 9.9. In the case of the experimental group a significant number of changes in the hypothesized direction via the Binomial Test is noted. In the case of the control group the number of changes in the hypothesized direction is not significant.

As shown in Table 9.7 (i) and Table 9.6, the pre-test State- and Trait-Anxiety scores are different for the experimental and control groups, but not significantly so (State-Anxiety: F=1.57, df=1;22, p0.05; Trait-Anxiety: F=2.60, df=1;22; p0.05). As reflected in Table 9.6, the mean pre-test scores of the experimental group on these measures show some tendency to be higher than those of the control group. In addition, it can be seen from Figures 9.2 and 9.3 that there are a number of subjects in the experimental group with scores far higher than any of the subjects in the control group. There is no significant difference between the two groups on the post-test State-Anxiety scores (F=1.39, df=1;22, p0.05). However, a significant difference exists between the experimental and control groups on the post-test Trait-Anxiety scores (F=5.17, df=1;22, p). As shown in Table 9.7 (ii), the interaction effect of the change by group is significant for both the State- and Trait-Anxiety scales (State-Anxiety: F=10.58, df=1;22; p; Trait-Anxiety: F=20.96, df=1;22, P). These significant interaction effects are clearly illustrated in Figures 9.2 and 9.3 and imply that the changes from pre- to post-test scores are different for the experimental and control groups. As noted in Table 9.9, for both the State- and Trait-Anxiety scales, there are a significant number of changes in the hypothesized directions for the experimental group via the Binomial Test. In contrast, there are no significant changes in the hypothesized directions for the control group on these two anxiety scales.

With regard to the six domains of perceived competence, the pre-test scores of the experimental and control groups are different. As shown in Table 9.6 and Table 9.7 (i), the pre-test mean scores for the experimental group are lower than those of the control group on the SPPC subscales of Social Acceptance, Physical Appearance, Behavioral Conduct, and Global Self-Worth but not significantly so. In the case of Social Acceptance, the difference is large enough to be significant. On the domains of Scholastic- and Athletic Competence the level of perceived competence is higher in the experimental group, but not significantly so. There is no significant difference between the experimental and control groups on the post-test scores of the SPPC subscales. However, as reflected in Table 9.7 (ii), the interaction effect of the change by group is significant for the SPPC subscales of Social Acceptance (SPPC 2: F=55.23, df=1;22, p), Physical Appearance (SPPC 4: F=11.22, df=1;22, p), Behavioral Conduct (SPPC 5: F=19.85, df=1;22, p), and Global Self-Worth (SPPC 6: F=26.27, df=1;22, p). These significant interaction effects are evident from Figures 9.5, 9.7, 9.8, and 9.9 and imply that the changes from pre-to post-test scores are different for the experimental and control groups. From these figures it can be

seen that the majority of subjects in the experimental group show an increase in their scores on these four SPPC subscales in comparison with no or very few subjects in the case of the control group. The results of the Binomial Test are shown in Table 9.9. On all the SPPC subscales, with the exception of SPPC 3, there is evidence that there are a significant number of changes from pre-to post-test scores in the hypothesized direction in the case of the experimental group, but not in the case of the control group.

At this juncture it is important to reiterate the differences between the pre-test means for the experimental and control groups on all the measures employed (see Table 9.7 (i) and Table 9.6). Such differences introduce competing hypotheses into the present study. That is, differences between the experimental and control groups after the intervention may have been because of the extreme scorers who had the highest potential for change. In addition, the differences between the two groups may have been because of the regression effect, whereby the extreme scorers drop to the group mean. On account of the experimental and control groups not being comparable on the pre-tests, a detailed examination of the data was conducted in an effort to understand the changes observed on the post-tests and to properly evaluate the efficacy of the intervention programme.

9.2.2 Results Based on the Modified Sample Sizes

In order to dismiss the argument that regression to the mean may have occurred, extreme scorers on the BDI pre-test, found only in the case of the experimental group, were omitted in a further ANOVA (See Table 9.6 for means and SD's on all scales for the original experimental and control groups, and Tables A.1-A.3 in Appendix 9 for sample sizes, means and SD's, and for the scores omitted from the original group. In all cases, the means of the experimental and control groups on the pre-test after omission of the extreme scores are more comparable). These extreme scorers had the highest potential for change. Thus change from pre- to post-test in the experimental group would have been expected to be larger than in the control group because of these extreme scorers. Moreover, by the regression effect the post-test scores of these extreme scorers on the pre-test would have been expected to drop to the group BDI mean. By omitting these extreme scorers the

competing hypotheses based on extreme scorers are no longer applicable. It is also important to note that none of the lowest BDI scores have moved upwards towards the mean of the post-test (see Figure 9.1). This would have been expected had regression to the mean occurred. Thus the competing hypothesis of the regression effect is not supported. As reflected in Table 9.8 (i), in omitting these scores the difference between the pre-test scores on the BDI for the experimental and control groups became not significant (F=0.15, df=1;17, p0.05). Omission resulted in more comparable pre-test means (In Appendix 9 see Table A.1 for pre-test means, and Table A.4 for pre-test and post-test means and SD's on all measures for the experimental and control groups on the modified sample sizes). For these two now comparable groups the post-test BDI scores are now significantly different (F=4.73, df=1;17, p). It can be seen from Table 9.8 (ii) that the interaction effect of the change by group is significant. This indicates that the change from pre- to post-test for the two comparable groups is still different (F=25.92, df=1;17, p). Hypothesis 1, which postulated that following intervention the post-test level of depression in the experimental group would be lower than that in the control group, is therefore supported.

A similar argument can be applied to the analysis of the State- and Trait-Anxiety Scales on the modified groups. The omission of those subjects in the experimental group with scores far higher than the subjects in the control group rendered the pre-test means of both groups to be much more similar. In the case of State-Anxiety, three subjects were omitted. With respect to Trait-Anxiety, four subjects were omitted (see Table A1 in Appendix 9). The competing hypotheses of the extreme scorers are no longer applicable due to removal of the extreme scorers. In the absence of the extreme scores it can be seen that the post-test scores on both the State- and Trait-Anxiety Scales are significantly different between the experimental and control groups (State-Anxiety: F=9.13, df=1;19, p; Trait-Anxiety: F=13.87, df=1;18, p). In addition, as shown in Table 9.8 (ii), the interaction effect of the change by group is still significantly different between the experimental and control groups on both anxiety scales (State-Anxiety: F=6.51, df=1;19, p; Trait-Anxiety: F=27.88, df=1;18, p 0.001). This indicates once again that the changes from pre-test anxiety scores to post-test anxiety scores on the State- and Trait-Anxiety scales differ for the experimental and control groups. This trend can be discerned from Figures 9.2 and 9.3. As in the case of the BDI, none of the lower pre-test scores on either the State- or Trait-Anxiety scales moved upwards towards the group mean. Once again, the competing hypothesis of the regression effect is not supported. The hypotheses which are supported are as follows: Hypothesis 2 a) which postulated that following intervention the post-test level of State-Anxiety would be lower

in the experimental group than in the control group; and Hypothesis 2 b) which postulated that following intervention the post-test level of Trait-Anxiety would be lower in the experimental group than in the control group.

On two of the six SPPC subscales, namely Social Acceptance (SPPC 2) and Behavioral Conduct (SPPC 5), analysis of the scores of the modified groups yields similar conclusions to those drawn for the depression and anxiety scales. An examination of Table 9.6 and Table 9.8 (i) and (ii) shows that omission of the extreme scorers rendered the experimental and control groups to be more comparable on their pre-test scores than before omission; post-test scores on these two measures to be significantly different between the experimental and control groups (SPPC 2: $F = 12.01$, $df = 1;18$; p; SPPC 5: $F = 10.04$, $df = 1;20$, p); and interaction effects of the change by group to be significantly different (SPPC 2: $F = 44.58$, $df = 1;18$, p; SPPC 5: $F = 15.88$, $df = 1;20$, p). As is evident from Figure 9.5 and Table 9.9, all subjects of the experimental group (9/9) improved their Social Acceptance scores compared to only one subject in the control group. As reflected in Figure 9.8, the majority of subjects in the modified experimental group (8/10) changed their Behavioral Conduct scores in the hypothesized direction. With respect to the control group, none of the subjects Behavioral Conduct scores improved in the hypothesized direction. Hypothesis 3 b), which postulated that following intervention the post-test level of adequacy in the domain of Social Acceptance would be higher in the experimental than in the control group is, therefore, supported. Hypothesis 3 c), which postulated that following intervention the post-test level of adequacy in the domain of Behavioral Conduct would be higher in the experimental than in the control group, is also supported.

As shown in Table 9.8 (i) and (ii), for the SPPC subscales of Scholastic (SPPC 1) and Athletic Competence (SPPC 3), no significant difference between pre- and post-test scores for either the experimental or control group were found, nor is there evidence of a significant interaction effect of the change by group after the omission of extreme scorers. In the case of Physical Appearance (SPPC 4) and Global Self-Worth (SPPC 6), omission of the extreme scorers yielded a significant interaction between the changes by group (SPPC 4: $F = 12.67$, $df = 1;21$, p; SPPC 6: $F = 24.15$, $df = 1;12$, p). However, the omission of the extreme scores did not result in significant differences between the post-test scores of the modified experimental and control groups on these subscales. Despite this, it is interesting to note that in the case of the subscale of Physical Appearance, almost all the subjects in the

modified (10/11) experimental group increased their scores on post-testing (see Table 9.9). This is in contrast with no subjects increasing their scores in the control group. Similarly in the case of the subscale of Global Self-Worth, post-test scores on the modified experimental and control groups are not significantly different. Once again the interaction of change by group is significant ($F = 24.15$, $df = 1;21$, p). All of the subjects in the experimental group changed their Global Self-Worth scores in the hypothesized direction (11/11), compared to only two subjects (2/12) in the case of the control group (see Table 9.9). Hypotheses 3 a), d) and f), which postulated that following intervention the experimental group would show higher levels of adequacy in the domains of Scholastic Competence, Physical Appearance, and Global Self-Worth respectively, are partially substantiated. With regard to these SPPC subscales there is a strong trend in the data. That is, the changes from pre- to post-test scores occur in the hypothesized directions for the majority of subjects in the experimental group, but not in the case of the control group. No such trend is evident in the case of the SPPC subscale of Athletic Competence. Hypothesis 3 c) is, therefore, not supported.

In Table 9.6, the means and standard deviations on all the measures for the experimental and control groups are presented on the original sample size. In Tables 9.7 (i) and (ii) and 9.8 (i) and (ii), summary results of the pre-test and post-test effects for all the psychological measures via Analyses of Variance are presented. In Tables 8 (ii) and 9 (ii) summary results of interaction effects for all the psychological measures via repeated measures ANOVAS are presented. In Table 9.7 (i) and (ii), results are reported for the total sample size. In Table 9.8 (i) and (ii), results are reported for the modified sample sizes. Figures 9.1 to 9.9 constitute line charts which show changes from pre- to post-test for each subject of the experimental group, superimposed by those of each subject in the control group.

Table 9.6

Means and Standard Deviations on all Measures for the Experimental and Control Groups on the Original Sample Size

	PRE-TEST				POST-TEST			
	Mean		SD		Mean		SD	
Test	Exp. N=12	Contr-ol N=12	Exp. N=12	Contr-ol N=12	Exp. N=12	Contr-ol N=12	Exp. N=12	Cont-rol N=12
BDI	13.75	12.33	11.96	6.71	11.08	14.08	8.96	7.59
STAI-A	44.90	38.92	15.15	6.82	34.75	38.75	10.50	5.08
STAI-B	47.92	41.92	11.35	6.11	35.33	42.50	9.59	5.21
SPPC 1	2.59	2.43	0.87	0.79	2.93	2.73	0.64	0.64
SPPC 2	2.11	2.69	0.72	0.59	2.94	2.57	0.63	0.58
SPPC 3	2.32	2.03	0.40	0.71	2.38	1.97	0.38	0.67
SPPC 4	2.28	2.85	0.98	0.80	2.69	2.76	0.97	0.82
SPPC 5	2.54	2.78	0.70	0.61	2.96	2.60	0.59	0.47
SPPC 6	2.50	2.94	0.53	0.57	3.20	2.89	0.52	0.51

NOTE:

SPPC 1 = Scholastic Competence
SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competance
SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct
SPPC 6 = Global Self-Worth

STAI-A = State-Anxiety
STAI-B = Trait-Anxiety

Table 9.7 (i)

Summary Results of Pre-test and Post-test Effects for all the Measures Via Analyses of Variance on the Total Sample Size (df= 1;22)

	Group Effect					
	Pre-test			Post-test		
Test	MS Effect	MS Error	F	MS Effect	MS Error	F
BDI	532.04	93.95	5.66 *	54.00	67.45	0.80
STAI-A	216.00	137.99	1.57	96.00	68.84	1.39
STAI-B	216.01	83.08	2.60	308.17	59.6	5.17 *
SPPC 1	0.14	0.69	0.21	0.22	0.41	0.55
SPPC 2	2.04	0.43	4.74 *	0.84	0.37	2.27
SPPC 3	0.51	0.33	1.56	0.98	0.30	3.28
SPPC 4	1.94	0.80	2.43	0.03	0.80	0.04
SPPC 5	0.34	0.50	0.67	0.78	0.28	2.77
SPPC 6	1.19	0.31	3.90	0.56	0.26	2.16

NOTE:

SPPC 1 = Scholastic Competence SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct SPPC 6 = Global Self-Worth

STAI-A = State-Anxiety
STAI-B = Trait-Anxiety

* $p<0.05$

Table 9.7 (ii)

Summary Results of Interaction Effects for all the Measures Via Repeated Measures ANOVA on the Total Sample Size (df= 1;22)

Interaction Effect For Repeated Measures ANOVA			
Test	MS Effect	MS Error	F
BDI	462.52	26.84	17.23 ***
STAI-A	300.00	28.35	10.58 **
STAI-B	520.08	24.81	20.96 ***
SPPC 1	0.01	0.15	0.03
SPPC 2	2.75	0.05	55.23 ***
SPPC 3	0.04	0.02	2.20
SPPC 4	0.75	0.07	11.22 **
SPPC 5	1.07	0.05	19.85 ***
SPPC 6	1.70	0.06	26.27 ***

NOTE:

SPPC 1 = Scholastic Competence
SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence
SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct
SPPC 6 = Global Self-Worth

STAI-A = State-Anxiety
STAI-B = Trait-Anxiety

* P<0.05
** P<0.01
*** P<0.001

Table 9.8 (i)

Summary Results of Pre-test and Post-test Effects for all the Measures Via Analyses of Variance on Modified Sample Sizes

	Group Effect					
Test	Pre-test			Post-test		
	MS Eff.	MS Err.	F	MS Eff.	MS Err.	F
BDI df=1;17	6.78	44.49	0.15	212.96	45.05	4.73 *
STAI-A df=1;19	1.15	79.43	0.01	317.81	34.81	9.13 **
STAI-B df=1;18	5.21	34.32	0.15	504.30	36.36	13.87 **
SPPC 1 df=1;20	0.02	0.61	0.04	0.00	0.36	0.00
SPPC 2 df=1;18	0.23	0.31	0.76	2.65	0.22	12.01 **
SPPC 3 df=1;19	0.36	0.19	1.94	0.73	0.18	4.10
SPPC 4 df=1;21	2.91	0.71	4.07	0.17	0.77	0.22
SPPC 5 df=1;20	0.00	0.37	0.00	1.77	0.18	10.04 **
SPPC 6 df=1;21	0.72	0.27	2.69	0.92	0.22	4.18

NOTE:

SPPC 1 = Scholastic Competence
SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence
SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct
SPPC 6 = Global Self-Worth

STAI-A = State-Anxiety
STAI-B = Trait-Anxiety

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 9.8 (ii)

Summary Results of Interaction Effects for all the Measures Via Repeated Measures ANOVA On Modified Sample Sizes

Interaction Effect for Repeated Measures ANOVA			
Test	**MS Effect**	**MS Error**	**F**
BDI	147.86	5.70	25.92 ***
STAI-State	140.39	21.58	6.51 *
STAI-Trait	203.50	7.30	27.88 ***
SPPC 1	0.02	0.16	0.10
SPPC 2	2.23	0.05	44.58 ***
SPPC 3	0.03	0.02	1.66
SPPC 4	0.83	0.07	12.61 **
SPPC 5	0.87	0.08	10.88 ***
SPPC 6	1.64	0.07	24.15 ***

NOTE:

SPPC 1 = Scholastic Competence
SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence
SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct
SPPC 6 = Global Self-Worth

STAI-A = State-Anxiety
STAI-B = Trait-Anxiety

* p < 0.05
** p < 0.01
*** p < 0.001

Table 9.9

Number of Changes from Pre- to Post-test Scores in the Hypothesized Directions for the Original and Modified Experimental and Control Groups

Test	Experimental Group		Control Group	
	Original (N=12)	Modified	Original (N=12)	Modified
BDI	12***	7 N=7	2	
STAI-State	11**	8 N=9	7	
STAI-Trait	12***	8 N=8	2	
SPPC 1	11**	9 N=10	7	
2	12***	9 N=9	1	
3	4	4 N=12	2	1 N=11
4	10*	10 N=11	0	1 N=9
5	10*	8 N=10	0	
6	12***	11 N=11		

NOTE:

SPPC 1 = Scholastic Competence SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct SPPC 6 = Global Self-Worth

* p<0.05
** p<0.01
*** p<0.001

Figures 9.1 to 9.9 :

Line Charts Showing Changes from Pre- to Post-Test for Each Subject of the Original Experimental Group on all the Measures, Superimposed by those of each Subject in the Original Control Group

Figure 9.1

BDI: Experimental Group

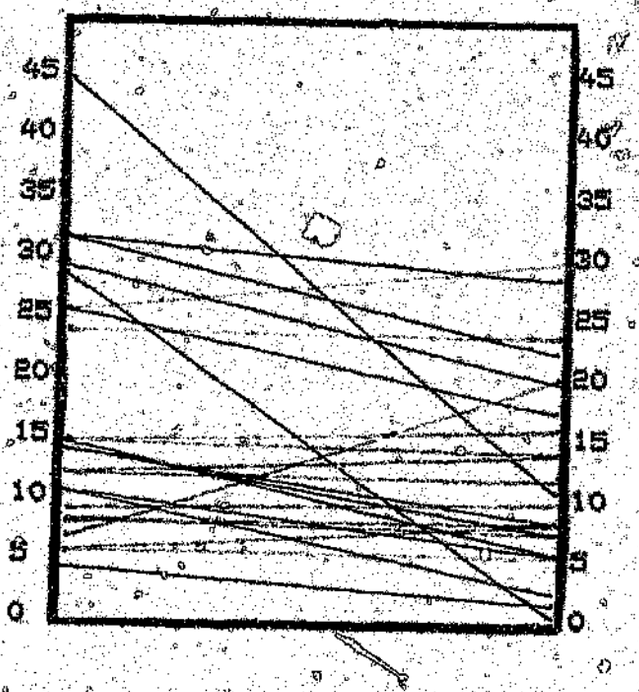


Figure 9.2

STAI-State: Experimental Group

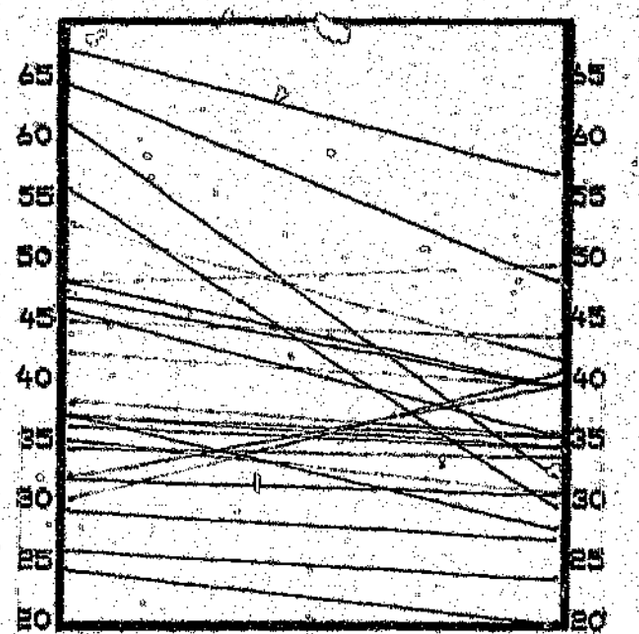


Figure 9.3

STAI-Trait: Experimental Group

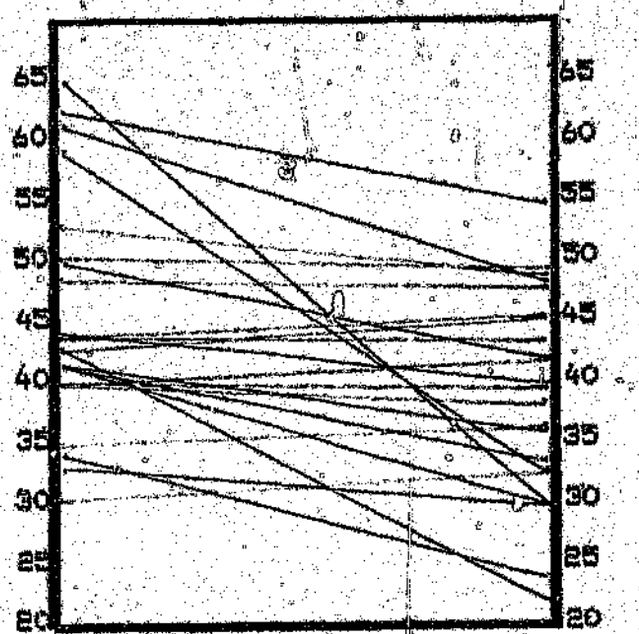


Figure 9.4

Scholastic Competence: Experimental Group

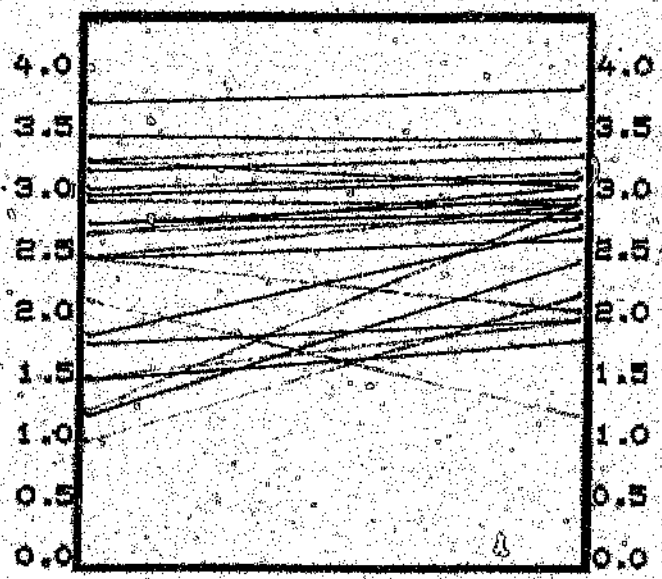


Figure 9.5

Social Acceptance: Experimental Group

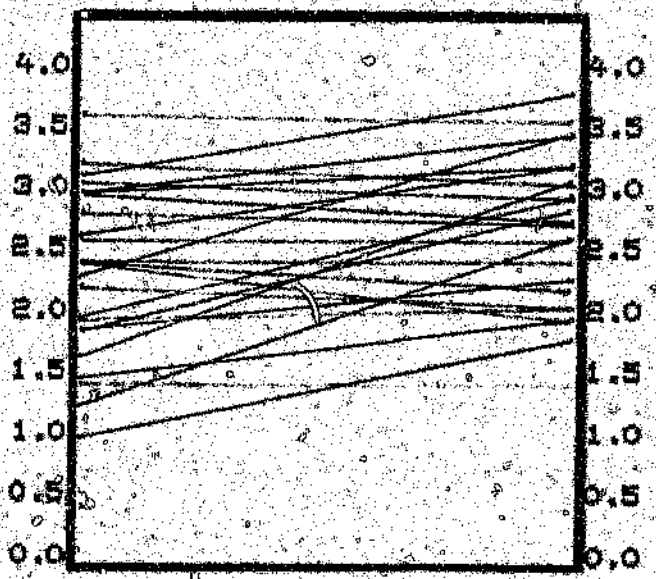


Figure 9.6

Athletic Competence: Experimental Group

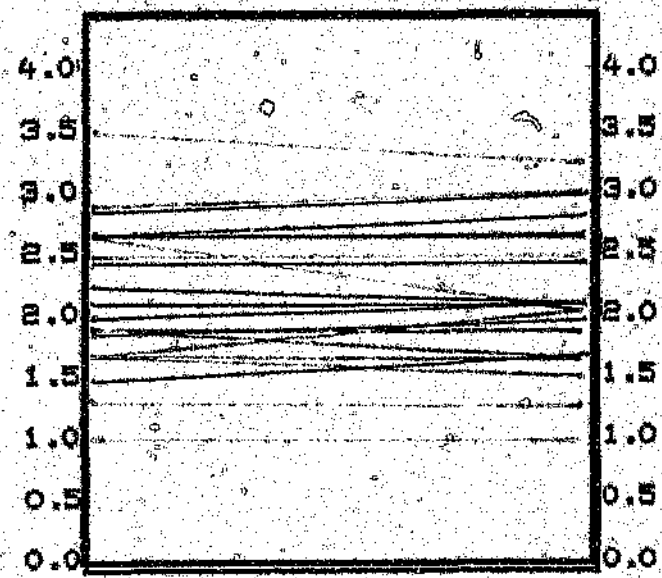


Figure 9.7

Physical Appearance: Experimental Group

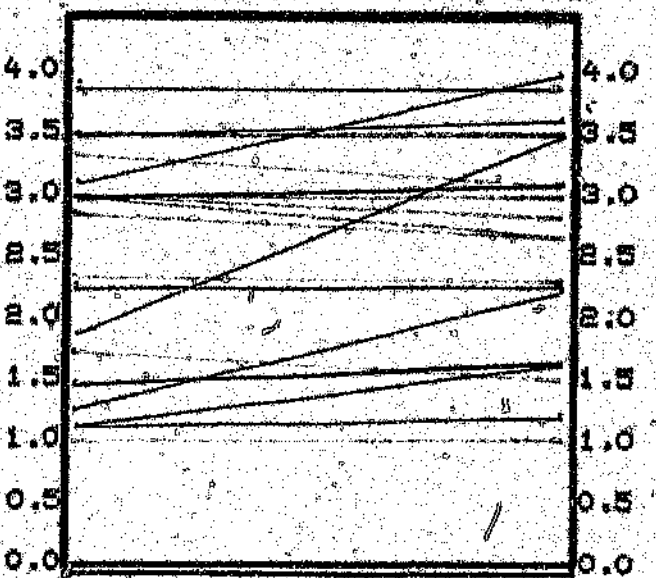


Figure 9.8

Behavioral Conduct: Experimental Group

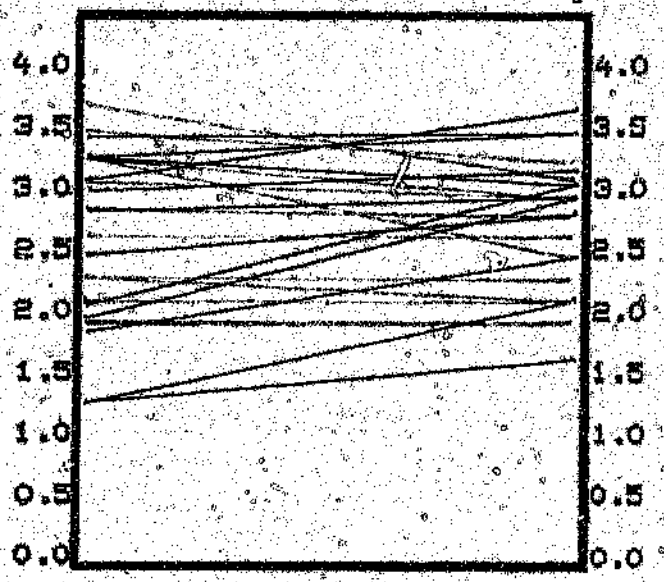
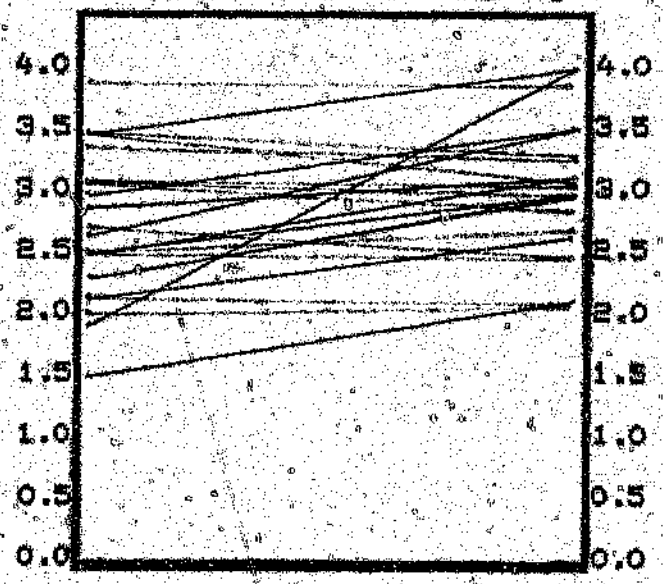


Figure 9.9

Global Self-Worth: Experimental Group



9.3 Feedback

On termination of the intervention, subjects in the experimental gronp (N = 12) provided the writer with feedback. They were asked to respond to the following: "What I have gained and learnt from this experience". They were asked, in addition, to indicate which aspects of the intervention had been most beneficial for them. Finally, they were asked to provide suggestions for improvement of the intervention (see Appendix 10 for examples of feedback).

9.3.1 Beneficial Aspects of the Intervention

The aspects of the intervention rated as beneficial are presented in Table 18. As indicated in the table, peer communication and support was reported as beneficial by 66% of the

sample. Training in problem-solving and positive self-talk were each reported as beneficial by 58% of the sample. In decreasing order of frequency, relaxation (33%), role plays (25%), bibliotherapy (17%), and free writing (8%) were reported as being beneficial by the participants.

Table 9.10

Frequency and Percentage of Subjects in the Experimental Group who Rated Various Aspects of the Intervention as Beneficial

Aspects of Intervention Rated as Beneficial	f N=12	%
Problem Solving	7	58
Role Play	3	25
Positive Self-Talk	7	58
Bibliotherapy	2	17
Free Writing	1	8
Relaxation and Visualisation	4	33
Peer Support and Communication	16	66

9.3.2 What the Subjects' Gained from their Experience

The participants of the intervention programme responded positively to the topic: "What I have learnt and gained from this experience". Some examples of what the adolescents reported in terms of feedback are presented below:

"I have gained back my self-confidence and my respect for myself"; "I have learnt not to keep a large problem to myself and rather to confide in someone else"; "It helped me a lot to calm myself from my parents...to communicate with people...with my school work and many other things"; "I really learnt how to cope with my problems. I never knew how to,

but since you came everything was turned around"; "The thing that I find most educational about the programme is that I have learnt to believe in myself"; "I have learned how to cope with my problems, not hide them away"; "My life is changed".

9.3.3 Suggestions for Changes in the Intervention Programme

The majority of the subjects in the experimental group reported being satisfied with the intervention programme. They stated that no changes should be made to the programme. Two participants offered suggestions for change. These suggestions are presented below:

*To separate boys and girls into separate groups so as to facilitate more open communication and sharing of problems.

*To include more role plays.

In this chapter, the results of the present study were presented. In the following chapter a discussion of the results is presented together with references to relevant literature.

CHAPTER 10: DISCUSSION OF RESULTS

In the present chapter, the results of the investigation implemented by the writer are discussed and related to the literature. The results of the descriptive statistics are discussed first, followed by a discussion of the results yielded by the ANOVAS and the Binomial Test. In the final section of this chapter, the feedback provided by the subjects in the experimental group is examined.

10.1 Discussion of Descriptive Statistics

10.1.1 The Sample Investigated

The biographical information collected on the subjects suggests that the adolescents in the present sample come from neither very disadvantaged nor very affluent homes. It would appear that they constitute average Coloured adolescents. The findings of the present study may, therefore, be said to be representative of the average adolescent in the Coloured community.

10.1.2 Profile of the Samples' Pre-Test Level of Depression, Anxiety and Perceived Competence

The psychological sequelae of stress are of primary concern in the present study. A discussion of the level of depression, anxiety, and perceived competence in the entire sample prior to intervention is presented below. The degree to which the sample was stressed, before therapeutic intervention or scholastic input took place, is commented upon. None of the psychological measures employed have been standardised on South African samples. Therefore, any statements about the performance of the present sample in relation to that of standardisation samples must needs be tentative.

i) Depression

In terms of the guidelines provided by Beck *et al.* (1961), the average level of depression in the sample, before intervention, falls within the Mild-Moderate range. There is great variability in the scores of the subjects. The lowest score is 4 and the highest, 45. Based upon the guidelines provided by Beck *et al.* (1961), a breakdown of the level of depression in the present sample is as follows: 29% fall within the Normal range; 37% fall within the Mild range; 21% fall within the Moderate-Severe range; and 13% fall within the range of Severe Depression. The aforementioned breakdown suggests that the level of depression in the majority (66%) of the subjects falls within the Mild and Normal ranges of depression. There is no manual available for the BDI. It is therefore not possible to make any comments about the level of depression in the present sample as compared to a standardisation sample. The writer considers this to be a limitation of the BDI as a measure of depression.

In the absence of a manual comprising standardisation data, the writer sought comparative data in research conducted with the BDI on similar samples. In a sample of adolescent boys (16-17 years old) in a high school in the United States of America, the mean score for the sample on the BDI was 12.62 (SD = 10.36), falling within the range of Mild Depression. The level of depression in the present sample appears to be higher than that of the comparative study, falling within the range of Mild-Moderate Depression (mean = 17.04; SD = 10.63). The subjects in the comparative study were drawn from a parochial school. The subjects in the present study were drawn from a low SES community that encounters a high level of acute and chronic stress. It is well documented in the literature that levels of mental health problems are higher among low socio-economic status individuals than among more privileged groups (Belle, 1990; Dohrenwend, 1990). According to proponents of the social causation hypothesis, the frequency of negative life events in low SES populations is positively related to levels of psychological dysfunction (Compas, 1987b; Myers *et al.*, 1974). Based upon the literature, and given the different socio-economic status of the present versus the comparative sample, the raised level of depression in the present sample is possibly due to the low socio-economic status of the participants.

ii) Level of Anxiety

A discussion of the level of pre-test State- and Trait-Anxiety in the present sample is presented below. Comparisons with standardisation samples are made. In the manual for the STAI, means and standard deviations are presented for males and females separately. Gender differences are not a focus of the present study. Therefore, for the purposes of discussion, the means and standard deviations of the standardisation sample are combined.

a) State-Anxiety

The mean score of the present sample on the State-Anxiety scale (mean = 41.92; SD = 11.09) is slightly higher than that of the normative sample (mean = 40.02; SD = 11.40). The State-Anxiety scale, which assesses how people feel "right now", is sensitive to test taking conditions (Spielberger, 1983). The raised mean score of the present sample on this measure suggests that the scale was administered under somewhat more stressful conditions than in the case of the normative sample. The fact that the sample barely knew the writer, and that the writer comes from a vastly different racial and socio-economic background from the subjects may have contributed to an increase in the level of State-Anxiety in the sample.

b) Trait-Anxiety

In a standardisation sample of high school adolescents (Spielberger, 1983), the mean Trait-Anxiety score is 41.10 (SD = 11.10). The mean Trait-Anxiety score for the present sample is therefore somewhat higher than that of the normative sample (mean = 44.92; SD = 9.3). The present sample is drawn from a low SES community which is typically exposed to more stressors than more privileged groups. It is noted in the literature that this more frequent exposure to stressors in low SES communities is positively related to increased

levels of psychological disorder within these communities (Belle, 1990 ; Compas, 1987b; Dohrenwend, 1990). Anxiety is documented in the literature as a psychological sequel of stress in low SES and adolescent populations (Daniels and Moos, 1990; Siddique and D'Arcy, 1984). The normative data for the STAI is not based upon disadvantaged samples. It is proposed that in light of the literature on the subject, the raised mean score of the sample under investigation may be due to the participants' low socio-economic status.

iii) Perceived Competence

The SPPC comprises six subscales. A comparison of the mean scores for the present sample on these subscales with the mean scores of the standardisation sample for the measure is presented below. As with the STAI, the means and standard deviations of the standardisation sample, which are presented for males and females separately, are combined for the purposes of discussion in the present study.

a) Scholastic Competence

The performance of the present sample on the Scholastic Competence Subscale of the SPPC is slightly lower than that of the standardisation sample (Present Sample: mean = 2.51, SD = 0.81; Standardisation Sample: mean = 2.73, SD = 0.70).

b) Social Acceptance

As with Scholastic Competence, the performance of the present sample on the Social Acceptance Subscale of the SPPC is lower than the performance of the standardisation sample. On this subscale, the difference is more marked (Present Sample: mean = 2.40, SD= 0.71; Standardisation Sample: mean = 3.11, SD = 0.64).

c) Athletic Competence

In keeping with the general trend, the performance of the present sample on the subscale of the SPPC measuring Athletic Competence is lower than the performance of the standardisation sample (Present Sample: mean = 2.17, SD = 0.58; Standardisation Sample: mean = 2.87, SD = 0.67).

d) Physical Appearance

As with the three former domains of competence, the mean score of the present sample on the Physical Appearance Subscale of the SPPC is lower than that of the standardisation sample (Present Sample: mean = 2.56, SD = 0.92; Standardisation Sample: mean = 2.74, SD = 0.67).

e) Behavioral Conduct

In keeping with the trend evident in the aforementioned data, the mean score of the present sample on the Behavioral Conduct Subscale is also lower than that of the standardisation sample (Present Sample: mean = 2.66, SD = 0.70; Standardisation Sample: mean = 2.92, Sd = 0.57).

f) Global Self-Worth

Finally, the performance of the present sample on the Global Self-Worth Subscale of the SPPC is lower than that of the normative sample (Present Sample: mean = 2.72, SD = 0.59; Standardisation Sample: mean = 2.95, SD = 0.64).

In summary, the pre-test performance of the present sample on the subscales of the SPPC is uniformly lower than that of the normative sample. The two samples differ markedly. The normative sample was drawn from lower to upper middle class neighbourhoods (Harter, 1985). The present sample, in contrast, was drawn from socio-politically disadvantaged neighbourhoods. The lack of self-esteem and feelings of mastery that pervade disadvantaged and oppressed communities has been well documented in the literature (MacClennan, 1968; Masterpasqua, 1990; Pearlin *et al.*, 1981). The findings that the subjects in the present study display lower self-perceptions of competence than their middle- to upper class normative counterparts is possibly due to their low socio-economic status.

10.1.3 Daily Stresses and Perception of the Environment

An essay and a drawing task were completed by the subjects in order to gain insight into their daily problems as well as into their perceptions of their environment. The findings yielded by these tasks are discussed below.

i) Daily Problems

The writing activity elicited painful self-disclosure and the expression of a wide range of problems. The writer thus gained important insight into the daily problems confronting the adolescents in the sample. The use of writing in clinical settings has been widely supported in the literature (Allan and Anderson, 1986; Ayalon, 1987; Pennebraker *et al.*, 1990; Wenz and Mowhirter, 1990). The rich data generated by the essays in the present study underscores the use of writing as an effective medium for eliciting significant feelings about difficult issues. It is felt that the frankness with which the children responded to the essay topic is indicative of their need to share their problems with a supportive and sympathetic other (for examples of essays, see Appendix 10).

Overall, school-related difficulties, problems with parents, and peer issues emerge as central areas of difficulty. School-related difficulties are the most frequently reported problem (reported by 50% of the sample). These difficulties pertain to being overwhelmed by the difficulty or bulk of school work, as well as to being disciplined in a particulary severe manner. Problems with parents follow as the next most frequently reported/prevalent problem in the sample (reported by 33%). Problems range from misunderstanding and communication difficulties, to overt physical or verbal conflict. Peer-related issues are reported by 19% of the sample. These issues include bullying by and fighting with peers, peer pressure to engage in deviant behaviour, and dilemmas regarding the opposite sex. These findings are consistent with the conceptualisation of adolescence as a time when major changes in family, school, and peer group structures occur (Petersen and Hamburg, 1986; Erikson, 1950, 1968). The results of the present study are also similar to the problems reported by the adolescents in the study by Stark *et al.* (1989; see section 5.1.1).

The rest of the problems reported by the sample include marital problems, family problems, and abuse. Marital problems of the subjects' parents include verbal and physical conflict, as well as divorce. The category of family problems comprises: financial difficulties, alcoholism, lack of a support system, and sibling rivalry. Finally, abuse of both a physical and sexual nature emerges as a problem area. These problems, while occurring in all population groups across all social stratifications, tend to be typical of low SES populations (Wills and Lagner, 1981; Dohrenwend, 1990).

An evaluation of the subjects' essays reveals that certain negative emotions are associated with the daily problems that they encounter. Anxiety and depression emerge as dominant emotions expressed either overtly or covertly in the essays of the subjects. Anxiety and depression are both psychological sequelae of stress that have been documented in low SES populations (Masterpasqua, 1989; Dohrenwend, 1973). In addition, these psychological sequelae have been documented in adolescent populations (Daniels and Moos, 1990; Siddique and D'Arcy, 1984; Youngs *et al.*, 1990). The presence of these emotions in the essays corresponds with the raised level of these emotions on the BDI and STAI measures as compared with the standardisation samples for each measure.

It is noteworthy that the issues that emerge as most central to the adolescents in the present study (that is, school difficulties, problems with parents, and peer-related issues) constitute typical adolescent issues, rather than issues typical of low SES populations. In an attempt to explain this finding it is proposed that adolescence, with its attendant changes and conflicts, emerges as a powerful force in the lives of these children and for the time-being overshadows other issues.

ii) Perceptions of the Environment

The subjects responded enthusiastically to the drawing task. They produced drawings that are expressive, and which convey their perceptions of their environment in a striking manner (for examples of drawings see Appendix 10). The effectiveness of drawings in assisting individuals to communicate perceptions and pent up feelings has been noted by several authors (Terr, 1989; Allan and Anderson, 1986).

An evaluation of the drawings reveals violence to be the most prominent theme. Most of the drawings show violent and bloody scenes of people stabbing, shooting, fighting or harassing each other. Drug abuse and aspects of being disadvantaged follow as the next most frequently depicted categories. The drug abuse depicted in the drawings includes sniffing of glue, smoking of marijuana, and the taking of pills. The drawings include various aspects of the environment that indicate their living in disadvantaged areas. Features of pollution, paucity of public amenities, lack of houses, an abundance of graffiti, and dirty washing are all depicted in the drawings. The abuse of alcohol and the raping of women are themes that are least frequently present in the drawings of the subjects. Drunken people are depicted as swearing at others, as being unstable on their feet, as collapsed on the ground. Distress, helplessness, anxiety and despair are communicated in the depictions of rape.

An examination of the drawings reveals the presence of anxiety in the majority of the drawings. A minority of the sample display features of contentment with the environment. These findings are not surprising, given that through the eyes of the adolescents in the

present sample, their environment is characterized by violence, drug and alcohol abuse, rape, and disadvantage.

It is striking that the general categories that emerge from the drawings predominantly reflect negative features of the environment. These features of the environment, although they occur across a broad spectrum of the community, are present to a far greater degree in socio-politically disadvantaged communities in this country. It is asserted, on the basis of the subjects' perceptions, that the present sample lives in a stress-inducing environment.

It is proposed by the writer that, in light of the data generated by the essays and drawings, it is not surprising that the adolescents in the present sample have elevated scores on measures of depression, anxiety, and perceived competence. They clearly constitute a group of individuals who, on a daily basis, have to confront a harsh environment together with numerous emotional issues heralded by the adolescent phase of their environment. It must also be noted that the violence that characterises the environment of the sample appears to be an ongoing, rather than an exceptional, feature. What emerges is that the present sample is exposed in an ongoing way to both chronic and traumatic stresses. The added trauma of continual violence must surely exacerbate the psychological stress suffered by these individuals.

10.2 Between Group Differences on the Psychological Measures Before Intervention

The results of the ANOVAS on the original sample size show that with regard to the psychological sequelae of stress, the experimental group was disadvantaged in comparison with the control group prior to intervention. The results indicate higher pre-test levels of Depression and State- and Trait-Anxiety in the experimental group than in the control group. In the case of depression, the difference is large enough to be significant. With regard to Perceived Competence, the experimental group perceive themselves to be less competent in four out of the six competence domains. In the case of Social Acceptance,

the difference is large enough to be significant. The only domains in which the experimental group is not disadvantaged in comparison with the control group are those of Scholastic- and Athletic Competence. In these domains the level of perceived competence is higher in the experimental group than in the control group, although not significantly so.

The differences between the two groups occurred despite random sampling and random sorting into experimental and control groups. It is noted by Christensen (1980) that when the randomization procedure is employed, there is a possibility that by chance the extraneous variables to be controlled are not equally distributed among the various groups of subjects. The smaller the size of the sample employed, the greater the risk of this happening. The small size of the sample in the present study may account for the fact that by chance the experimental and control groups were not really comparable on many levels to begin with.

In summary, the present study employed measures of depression (BDI), anxiety (STAI) and perceived competence (SPPC) in order to measure the psychological sequelae of stress in the sample. The pre-test levels of these sequelae in the sample were used as an indication of the level of stress in the sample. The results of the ANCVAS indicate that, prior to intervention, the experimental group was more stressed than the control group. It must be noted that the decision as to which group would receive the treatment and which would be the control was a random one. It was purely by chance that the experimental group, as the group more in need of intervention, received such intervention.

10.3 Changes in the Experimental and Control Groups Following Intervention

The statistical analyses computed on the original sample size indicate that in the case of the experimental group the intervention had the desired therapeutic effect, decreasing depression and anxiety and increasing perceived competence. In the case of the control group, the input that they received is predominantly not associated with a decrease in the psycho-

logical sequelae of stress. However, the fact that, despite random sampling and sorting into groups, the experimental and control groups were not really comparable to begin with introduces competing hypotheses into the study. That is, differences between the experimental and control groups on post-test may have been because of the extreme scorers in the experimental group who had the most potential for change. In addition, differences between the two groups may have been because of the regression effect. In order to properly examine the efficacy of the intervention programme, the competing hypotheses had to be eliminated. This was achieved by way of elimination of extreme scorers in a further ANOVA and a re-examination of the results. It should be noted that there was no consistency with regard to which subjects achieved extreme scores on the various tests. Accordingly, the results of each test were examined in isolation and the extreme scorers therein were eliminated. The results of the analyses computed on the modified sample sizes are discussed below.

The hypotheses of the present study postulate that the experimental group will show improvement on the measures of depression, state- and trait-anxiety and perceived competence. In the experimental group, the change from pre- to post-test occurs in the desired direction. That is, in comparison with pre-test scores, the post-test level of anxiety and depression in the experimental group is lowered, while the level of perceived competence, in all of the six domains of perceived competence, is raised. It would appear that the intervention had the desired therapeutic effect.

With regard to the control group, the change from pre- to post-test differs from that of the experimental group. On all measures, with the exception of the Scholastic Competence subscale of the SPPC, the change occurs marginally in the opposite direction to the experimental group or there is very little change at all. This indicates that the input received by the control group is predominantly not associated with a decrease in the psychological sequelae of stress. The increase in the level of Scholastic Competence in the control group may be explained by the fact that this group received input in this particular domain. The fact that the five remaining domains of perceived competence show no improvement is possibly due to the fact that the input received by the control group was purely cognitively based. It is interesting to note the slight increase in the levels of depression and anxiety, and decrease in the levels of perceived competence in the case of the control group in all domains except that of Scholastic Competence. A possible explanation for this is as follows: on

receiving scholastic input the members of this group may have felt that there were raised expectations as to their academic performance in the impending school examinations. This may have exacerbated the existing levels of stress in the control group. In addition, the examinations to be completed shortly after the post-testing was conducted were the **final** school examinations. These examinations tend to be more important and consequently more stressful than mid-year examinations. The input received by the experimental group was not syllabus orientated. An expectation of heightened academic performance would not have applied to the subjects in this group.

10.4 Between Group Differences on the Psychological Measures After Intervention

Interventions employing **COPE** have been evaluated in simulated situations and under conditions of terrorist attack in kibbutzim and border development towns in Israel (Ayalon, 1979,1983; Lahad and Cohen, 1981). Evaluation has taken place predominantly by way of observation and interviews with relevant parties. Feedback on the effectiveness of the programme has been positive; so much so that in 1982 it was accepted for application throughout the educational system in Israel (Lahad and Cohen, 1981). It has also formed the basis of other interventions (Lahad, 1989).

The findings of the present study indicate that an intervention programme employing **COPE** as its basis, and integrating affective, cognitive and behavioral methods of intervention, is associated with improvements in psychological sequelae of stress. Results of the ANOVAS on the modified sample sizes indicate that, in comparison with the control group, the experimental group shows significant improvement in levels of depression, as well as State- and Trait-Anxiety after being exposed to the therapeutic intervention. With respect to the domains of Perceived Competence, and in comparison with the control group, the experimental group shows significant improvement in the domains of Social Acceptance and Behavioral Conduct following intervention. Due to the small size of the sample employed, it is asserted that the significant results obtained in the present study are meaningful. That is, the results are based upon large differences between the means of the experimental and control groups.

With regard to the remaining domains of Perceived Competence, the difference between the experimental and control groups on post-test is not significant. However, the Binomial Test shows that in all domains of Perceived Competence, with the exception of the domain of Athletic Competence, the majority of the subjects in the experimental group changed their scores in the hypothesized directions. This was not so in the case of the control group. This strong trend in the data suggests that the intervention was effective in terms of raising the subjects' perceptions of Perceived Competence. It appears that the intervention programme would need to be carried out over a longer period of time in order for a significant shift in Perceived Competence to be achieved. The results indicate that perceived competence is a more stable concept than either depression or anxiety. The absence of change occurring in the hypothesized direction in the domain of Athletic Competence is not surprising in view of the fact that the intervention programme did not address or involve any aspect of athletic competence. All the other domains of perceived competence were addressed implicitly or explicitly in the course of the programme. This domain of perceived competence would have to be included in future programmes in order for any change to be observed in the subjects' perception of their Athletic Competence.

The findings of the present study are consistent with existing positive feedback about COPE as a programme of intervention for children and adolescents under stress (Ayalon, 1987, 1979, 1983; Lahad, 1989; Lahad and Cohen, 1981). Given that controlled studies have not been conducted employing COPE (Ayalon, 1979), the present study may be seen to contribute to the body of literature on this particular approach to intervention. The findings of the present study reinforce a current perspective in the literature that interventions which assist individuals to cope with frequent daily stressors could contribute significantly to the alleviation of stress-related problems (Tolman and Rose, 1985). In addition, the findings reinforce group work as an effective approach for working with stress (Hains and Szyjakowski, 1990; Tolman and Rose, 1985). Further, the results highlight an integrative therapeutic approach as being an effective approach to intervention with adolescents under stress (Keat, 1979; Lazarus, 1971, 1976). Significant changes in psychological sequelae of stress were witnessed in the experimental group within a relatively brief period of time. This may be explained by the fact that coping and adaptational skills are developing rapidly during childhood and adolescence (Compas, 1987). It is for this reason that these age groups have

been targeted as critical periods for prevention programmes designed to enhance coping skills (Compas, 1987a, 1987b; Romano, 1988). It must, however, be noted that the enthusiasm of the writer and her investment in the programme may have influenced the responses of the subjects in the experimental group (Christensen, 1980). An experimenter effect can, therefore, not be ruled out. The findings of the present study must be considered with these factors in mind.

An attempt will be made to relate the finding of the present study to the transactional model of stress and coping adopted for the purposes of the present study (Lazarus and Folkman, 1984, 1987). In terms of the definition of stress associated with this model (see Section 3.1), the therapeutic intervention appears to have equipped the youths with added resources for coping with stress. The intervention programme provided the subjects with an emotional outlet together with peer-group support and a variety of coping skills. In terms of the conceptual model, the results of the present study suggest that the programme has succeeded in augmenting aspects of both "person-" and "environmental variables". That is, it appears to have achieved its aim of enhancing self-esteem, mastery and a sense of control in the subjects. With regard to environmental variables, the programme appears to have succeeded in creating a firm social support network amongst the participants. With respect to the mediating process of "secondary appraisal", the programme attempted to educate the subjects in a variety of coping skills that fall under both forms of coping outlined in the model; namely, emotion- and problem-focused coping. In addition, the programme aimed at enhancing the use of peer-group support. In equipping the youths with a variety of coping skills within a supportive environment, the programme appears to have succeeded in ameliorating the adverse psychological effects of the daily stresses in the lives of the subjects. It would appear that the programme rendered the subjects in the experimental group to be more resilient to such stresses.

In summary, the results of the ANOVAS computed on the modified sample sizes show that the competing hypotheses are not substantiated and that the hypotheses of the investigation are predominantly substantiated. The following Hypotheses are fully substantiated:

Hypothesis 1, which postulated that following intervention the post-test level of depression in the experimental group would be lower than that in the control group;

Hypothesis 2 a) which postulated that following intervention the post-test level of State-Anxiety would be lower in the experimental group than in the control group;

Hypothesis 2 b) which postulated that following intervention the post-test level of Trait-Anxiety would be lower in the experimental group than in the control group;

Hypothesis 3 b), which postulated that following intervention the post-test level of adequacy in the domain of Social Acceptance would be higher in the experimental than in the control group;

Hypothesis 3 e) which postulated that following intervention the post-test level of adequacy in the domain of Behavioral Conduct would be higher in the experiemental than in the control group.

The following hypotheses are only partially substantiated:

Hypotheses 3 a), d) and f) which postulated that following intervention the experimental group would show higher levels of adequacy in the domains of Scholastic Competence, Physical Appearance, and Global Self-Worth respectively. With regard to these SPPC subscales the majority of the subjects in the experimental group changed their scores in the hypothesized directions as opposed to one or no subjects in the case of the control group. In the case of the SPPC subscale of Athletic Competence no such trend is evident. Hypothesis 3 c) is, therefore, not substantiated.

The findings of the present study offer support for an integrative therapeutic approach that employs creative mediums within the context of peer-group support. The results suggest that a therapeutic approach of this nature may be the course to follow in terms of therapeutic intervention with stressed, disadvantaged adolescents.

10.5 Feedback

The subjects in the experimental group were asked to provide feedback on the following: which aspects of the programme were most beneficial for them; what they gained and learned from the experience; and what elements of the programme could be improved? Their responses to each of the above will be discussed in turn (See Appendix 10 for examples of feedback).

10.5.1 Beneficial Aspects of the Intervention

Based upon the feedback of the participants of the present study, the aspects of the intervention that emerge as most beneficial include: peer support and communication, problem-solving training, and positive self-talk.

Peer support and communication constitute the aspects of the intervention programme rated as beneficial by the majority of participants in the present study. The important role that communication within a supportive network plays as a buffer against stress has been widely documented in the literature (Ayalon, 1987; Caplan, 1974 cited in Ayalon, 1983; Walker and Greene, 1987). A recent study showed support from peers, but not from parents, to be an important buffer against stress (Kaplan, Robbins, and Martin, 1983). The feedback of the participants in the present study underscores the vital role of peer support and communication in assisting adolescents to cope with stress.

Training in problem-solving was reported as beneficial by 58% of the sample. It has been shown that the ability to generate a variety of alternative solutions to hypothetical problems is related to adjustment in children and adolescents (Spivack and Shure, 1985). Training in problem solving skills is widely considered to be an important treatment domain in coping skills programmes (Glyshaw *et al.*, 1989; Tache and Seyle, 1978; Matheny *et al.*,

1986). The feedback of the subjects in the present study reinforces the value of problem-solving as a coping behaviour.

As with problem-solving training, training in the substitution of negative thoughts with positive coping ones was reported as beneficial by 58% of the sample. This technique of stress inoculation is considered to be a useful stress management technique in a variety of stress situations (Cameron and Meichenbaum, 1982; Stoyva and Anderson, 1982). The frequent use of this coping strategy by adolescents has been noted by Brown *et al.*(1986).

In decreasing order of frequency, the following aspects of the programme were rated as beneficial: relaxation and visualisation (33%), role play (25%) and free writing (8%).

In summary, all aspects of the programme were rated as beneficial to greater or lesser degrees. The aspect of the programme reported as beneficial by the least number of participants is that of free-writing. This may be due to the fact that the level of written English in the sample is relatively low. The subjects may have struggled somewhat with the written exercises, even though the emphasis was not upon grammar and spelling. The aspect rated beneficial by the majority of subjects is that of peer support and communication. The thrust of the intervention was to foster such support and communication. It is noteworthy that the central feature of the programme is that regarded as most beneficial.

10.5.2 What Subjects Gained From Their Experience

It would appear that the subjects in the experimental group feel that they gained a large amount from the intervention. From their feedback it appears that the coping skills programme was associated with: enhancing their confidence and self-esteem; helping them to communicate with others, particulary their peers; assisting in diffusing family conflicts; assisting them with anxiety surrounding school work; and guiding them in confronting problems in an active rather than a passive manner. The positive nature of the feedback is consistent with the findings that the experimental group improved significantly on

measures of depression, anxiety, and on certain domains of self-competence following the intervention.

10.5.3 Suggestions for Change

Suggestions for change were offered by only two members of the experimental group. The majority of the subjects reported being satisfied with the intervention programme as devised for the purposes of the present study. Of the two suggestions put forward, it is felt that the recommendation to split boys and girls in future interventions is a particularly valid one. As documented in the literature (e.g. Freud, 1905; Blos, 1971, 1979), boys and girls develop physically and emotionally at different rates. Their emergent sexuality can give cause for embarrassment and a tendency to avoid such areas in discussion. It is felt by the writer that it would be interesting to conduct the present programme of intervention with males and females in separate groups. A comparison of the results and feedback of such a study with the present one would provide important information about an intervention programme of the nature implemented in the present study.

The findings of the present investigation seem to support a therapeutic approach that integrates affective, cognitive and behavioral elements within the context of peer support as being effective in assisting disadvantaged Coloured adolescents to cope with the stresses in their daily lives. Certain limitations became apparent while conducting the present research. The findings must be considered in the light of these limitations. The limitations that emerged while conducting the present investigation are considered in the following chapter; together with suggestions for future research.

CHAPTER 11:
LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Several limitations became apparent during the course of the present study. These limitations may have influenced the findings of the study. In addition, conducting of the research illuminated certain areas for future research. Both the limitations of the study and suggestions for future research are presented below.

11.1 Limitations of the Study

A major limitation of the present study arose from the small size of the sample employed (N=24). This small sample size restricted the complexity of statistical analyses that could be carried out on the data. In addition, it increased the possibility of randomization not operating effectively. Further, it reduced the generalizability of the findings. It should be noted, however, that a somewhat larger sample size was initially intended (N=32). The sample size was reduced due to unavoidable absenteeism. In addition, it should be noted that, by employing only one therapist, a study of this nature requires a small sample so as to ensure that therapist contact with the participants is maximised.

The differences between the pre-test means for the experimental and control groups on all the measures employed emerged as a central limitation of the present study. In the event of future research, especially if the sample size is small, using the pre-test scores to construct equivalent experimental and control groups would avoid this potential pitfall.

With regard to the instruments employed, none have been standardised on the population under investigation. Therefore, all statements about the relative level of anxiety, depression and competence in the sample under investigation need to viewed cautiously. As no

measures of depression, anxiety or competence have been specifically designed for or standardised on the population under investigation, this limitation could not be avoided. The pressing need to develop measures for use with this population is highlighted.

The positive changes in the experimental group, while seemingly associated with the intervention, could also have been affected by characteristics of the writer that are difficult to quantify. The expectancies of the writer may also have affected the outcome of the study (Christensen, 1980). The keenness with which the writer implemented the intervention and her investment in the programme may well have influenced the response of the experimental subjects to the intervention. The post-testing was conducted by a third party unknown to both the experimental and control groups. However, the writer was present in the room to supervise in the event of any complications. It is felt that this situation could have resulted in some bias in the youth's self-reports. It should also be noted that it was impossible to prevent the participants in the experimental and control groups from speaking to each other about their experiences in their respective groups. Talking amongst themselves may have influenced the results.

The reliance on self-report measures is in and of itself a potential limitation of the study as it raises the issue of validity. The self-report method is vulnerable to the test-taking attitudes of the respondents (Wilde, 1972). In addition, response bias of the subject such as, social desirability and acquiescence, can lead to the generation of highly inaccurate profiles (Calhoun, 1977). The data in this study must be viewed with these possible distortions in mind. However, although these measures have been criticised (Compas, 1987b), other studies support the relative validity of self-reports (Shrauger and Osberg, 1981, cited in Billings, Cronkite and Moos, 1983). Despite their limitations, paper-and-pencil self report questionnaires are economical, sensitive to a broad range of measurement contexts and have a certain face validity in that the respondents are asked directly to indicate how they feel towards specific issues (Chaplin, 1984; Stehouwer, 1984). Therefore, despite their limitations, the choice of such measures for use in the present study seems justified.

On completion of the intervention programme Essay Two, which asked for the subjects' subjective evaluation of the programme, was only administered to the experimental group.

Failing to administer this essay to the control group constitutes a limitation of the present study. It would have been interesting to note these subjects' responses to their particular intervention. In addition, their responses may have shed light on the scores achieved by this group. On reflection, the question put to the experimental group was directive and may have slanted the subjects' views towards a favourable evaluation of the programme (see Appendix 10). A more neutral question would have avoided this potential limitation.

In attempting to control for historical variables the writer ensured that the experimental and control groups were running on the same day, at the same time. This made it impossible for both groups to be run by the writer. Having different individuals working with the two groups introduced the potential bias of experimenter attributes which may have affected the results of the study. Three categories of attributes that influence research have been proposed in the literature; namely, biosocial attributes, psychosocial attributes, and situational factors (Rosenthal, 1966, cited in Christensen, 1980). It should be noted that both experimenters were white, female, twenty-five years of age, of the same religion, and from the same socio-economic background. In terms of biosocial attributes, the experimenters may be said to have been as equivalent as possible. In terms of situational factors, the experimenters worked in classrooms that were almost identical in physical appearance. It was not possible, however, to control for the psychosocial attributes of the experimenters.

It is proposed that conducting the programme after school hours constituted a limitation. The children were tired after a long day at school and various familial responsibilities and sporting activities occasionally interfered with the running of the programme. It is felt that it would have been more useful to meet during school hours so that regular attendance could be achieved with little difficulty. It should be noted that the writer was only granted permission to work outside of school hours. It is asserted that in future programmes of this nature it would be worthwhile to insist upon working during school hours.

It is felt that a limitation of the present study lay in the fact that the writer, who conducted the intervention, is middle class and therefore socially, culturally and ethnically different from the youth who participated in the study. The writer had to work extremely hard at developing rapport with the participants in the study; who were at first wary and uncomfort-

able. The youths would have been able to identify more easily, and feel more comfortable, with a therapist whose background and experience was more similar to their own. It is proposed that the effectiveness of the intervention would have been further enhanced under these circumstances.

11.2 Suggestions for Future Research

In South Africa there has been a paucity of research into viable stress management intervention programmes for children exposed to multiple stresses in their daily lives. The need for more research into such programmes is evident. The findings of the present study support an intervention programme that integrates emotional, cognitive, and behavioral elements as being effective in reducing the psychological sequelae of stress. It is asserted that further investigations into the present intervention programme should be undertaken so as to fully understand the possibilities that such a programme has to offer. It is proposed that several avenues for future research exist. Suggestions in this regard are presented below.

It was beyond the scope of the present study to conduct follow-up investigations. A follow-up for both the experimental and control group would have provided additional information in terms of changes that were maintained. Follow up would also have been useful in discovering which skills and concepts imparted by the intervention programme were most useful in facilitating coping with stress. It is suggested that future research undertaken with the present intervention programme should include follow-up investigations at six months and a year after intervention so as to evaluate more fully its effectiveness in assisting children and adolescents to cope with stress. Such follow-up should include a re-testing of all the participants on the measures employed in the study. An examination of school performance might contribute important additional information. In addition, the participants' subjective views regarding their coping abilities would be of interest. Their views could be obtained by way of essays or interviews.

There has been an important shift in the literature from looking at illness and vulnerability to focusing upon "resilience" and "invulnerability" (Garmezy and Rutter, 1988). An impor-

tant area of investigation would be to explore whether an intervention of the nature employed in this study is successful in assisting children to become more resilient to the stresses that they encounter in their daily lives. In addition it would be interesting to explore whether those individuals who benefit most from such a programme are more resilient in the first place and if so what makes them so.

The data yielded by the structured and unstructured measures completed by the adolescents in the study constituted the only information about the children's mental health, pre- and post intervention. Additional input from parents and teachers, both in terms of stressors encountered, symptoms displayed and benefits derived from intervention, would complement this data in an important manner.

The psychologically-based intervention implemented in the present study was conducted on a restricted sample of Coloured adolescents. South Africa, with its culturally heterogenous population, offers vast opportunities for cross-cultural research. It is suggested that an intervention programme, of the nature implemented in the present study, should be conducted in the various population groups that comprise the South African population. It would be interesting to note the differential effectiveness of such a programme of intervention upon the youth of different population groups. The present study focused upon young adolescents. The effectiveness of its use in South Africa with children of various ages remains to be documented. In addition, it would be important to document what constitutes daily stressors for adolescents from different population groups. It would be interesting to note similarities and differences in this regard.

It is submitted that the black youth in South Africa constitute a group particulary in need of crisis intervention. The present research focused upon daily, chronic stressors. South African youth in the black townships are exposed to stress of both a chronic and traumatic nature. Research is needed into the effectiveness of an intervention programme, such as the one employed in this study, in reducing the effects of traumatic stress among these youths. Such research might have important implications for the mental health of the majority of South African youth.

It was beyond the scope of the present study to focus upon sex differences in response to stress or to the programme. At adolescence sex-role development is well underway. The influence of sex on responses to stress as well as on responses to intervention c nstitutes an interesting and important area for future research.

Methodologically it might be desirable for future research to employ measures of the psychological sequelae of stress that have been standardized on South African populations. This would facilitate statements about the relative degree of disorder in the sample investigated. It would also facilitate the conducting of comparative, cross-cultural studies in South Africa.

Finally, it is proposed by the writer that a programme of the nature implemented in the present study should ultimately be incorporated into the South African school system in an on-going, preventative way. The schools of low SES populations, who experience greater stresses in their lives, should be targeted as a priority. It is submitted that this would greatly reduce the number of children who develop psychological sequelae in response to prolonged stress. The training of teachers in the various techniques employed in the intervention, and the documenting of their receptivity and responses to such a programme, would go a long way towards mobilising for the eventual inclusion of such a programme as an integral part of the school curriculum. In addition, the documenting of the effectiveness of the programme when implemented by non-professionals is vital in determining its viability in the school system.

In the current chapter, limitations of the present research were discussed and suggestions for future research were presented. In the following chapter a summary, conclusion, and implications of the present investigation are presented.

CHAPTER 12:
SUMMARY, CONCLUSION AND IMPLICATIONS

Children and adolescents in South Africa are growing up in a country beset by political violence and severe economic crisis. The majority of youths in this country are socio-politically disadvantaged. For these youths the current crises are superimposed upon the chronic stresses associated with living under the oppressive and discriminatory social system of apartheid. Mental health professionals are acutely aware that the present situation is likely to have adverse effects upon the psychological well-being of these youths. Unless addressed, the current situation could give rise to a generation of psychologically scarred and disturbed children.

It is well documented in the literature that high levels of stress, of a traumatic or chronic nature, have morbid consequences for the psychological and physical well-being of the individual (Compas, 1987b; Holmes and Rahe, 1967; Lazarus, 1981). Recent research indicates that frequent daily stressors may impact more profoundly upon the mental health of individuals than traumatic events (Lazarus, 1981). The ability to cope effectively with chronic, daily stress clearly has important consequences for the physical and mental health of the individual. The ability of the vast number of socio-politically disadvantaged youth in South Africa to cope with the stresses that confront them on a daily basis has profound consequences for the building of a future South Africa.

This study was prompted by the grave nature of the present political and social situation, as well as by the lack of any comprehensive intervention programmes for children under stress in South Africa. It was also stimulated by the dearth of applied stress research into so-called "normal" apartheid related conditions. Finally, the present investigation was stimulated by the observation that the Coloured population of South Africa is grossly under-represented in psychological research.

It is documented in the literature that the psychological sequelae of stress can be effectively ameliorated by way of therapeutic intervention (Ayalon, 1987, 1983; Lahad and Cohen, 1981; Lahad, 1989). It was proposed by the writer that a coping skills programme developed in Israel by Ayalon (1987) for children exposed both to daily and traumatic stress, offered important possibilities as a basis for intervention within the South African context. This programme, called "Community Oriented Preparation for Emergency" (COPE) has proven to be effective with regard to negative life events and situations of traumatic stress (Ayalon, 1979, 1983; Lahad and Cohen, 1981). The programme has not, however, been evaluated in the form of controlled studies; neither has its use under conditions of mundane stress been explored.

In light of the above, the present study set out to achieve two aims. The primary aim of the study was to investigate the efficacy of a psychologically-based intervention programme, modelled upon COPE, in assisting Coloured adolescents to cope with the stresses of daily living. The secondary aim of the present investigation was to describe the environment of the adolescents and the daily stresses that they encounter, as seen through their eyes.

The sample comprised twenty-four Coloured adolescents drawn from Coronationville Secondary School in Coronationville. The sample was equalised for age, sex and standard. The average age of the sample was 13.42 years (SD=0.58 years). Subjects were randomly selected and then randomly assigned to either an experimental or control group. Both the experimental and control groups were pre-tested on the following psychological measures: the Beck Depression Inventory (BDI), the State-Trait Anxiety Inventory, and the Self-Perception Profile for Children (SPPC). In addition, all the subjects completed an essay and drawing task in order investigate their daily stresses and perception of their environment. The experimental group received ten sessions of therapeutic intervention over a five week period. During this time, the control group received syllabus orientated input. Following the intervention, the experimental and control groups were re-administered the BDI, STAI and SPPC.

School-related difficulties, problems with parents, and peer-related issues emerged as the central areas of difficulty in the daily lives of the sample. Other daily problems commonly

reported included: marital problems of parents (conflict and divorce), family problems (sibling rivalry, financial difficulty, alcohol abuse, lack of a support system), and abuse (physical and sexual). The majority of the subjects perceived their environment to be a particulary violent and frightening one. Through the eyes of the adolescents in the present study their environment is one characterized not only by violence but by drug abuse, alcohol abuse, rape, and disadvantage. It was found that the aforementioned situation engenders anxiety, as well as feelings of depression and desperation in these adolescents whose existence is clearly characterised by numerous stresses.

An examination of the results of the statistical analyses revealed differences between the pre-test means for the experimental and control groups on all the measures employed. Such differences introduced competing hypotheses into the present study. That is, differences between the experimental and control groups after the intervention may have been because of the extreme scorers who had the highest potential for change. In addition, the differences between the two groups may have been because of the regression effect, whereby the extreme scorers drop to the group mean. A detailed examination of the data was conducted in an effort to understand the changes observed on the post-tests and to properly evaluate the efficacy of the intervention programme. The results of the Analyses of Variance computed on the modified sample sizes were as follows: Following intervention, the levels of Depression and State- and Trait- Anxiety in the experimental group were significantly lower than the corresponding levels in the control group. In addition, the levels of Perceived Competence on the Social Acceptance and Behavioral Conduct subscales of the SPPC were significantly higher in the experimental group than in the control group. The mean post-test scores of the experimental group on the remaining subscales of the SPPC; that is, Scholastic Competence, Physical Appearance, and Athletic Competence, were higher than those in the control group, although not significantly so. The results of the Binomial Test showed that in the case of the experimental group, but not the control group, the majority of subjects changed their scores in the hypothesized directions in all domains of Perceived Competence, except that of Athletic Competence. The following hypotheses were consequently fully substantiated:

* **Hypothesis 1**, which postulated a lower level of depression in the experimental as opposed to the control group after intervention.

* **Hypothesis 2 a)**, which postulated a lower level of State-Anxiety in the experimental group as opposed to the control group after intervention.

* **Hypothesis 2 b)**, which postulated a lower level of Trait-Anxiety in the experimental group as opposed to the control group after intervention.

* **Hypothesis 3 b)**, which postulated that following intervention the post-test level of adequacy in the domain of Social Acceptance would be higher in the experimental than in the control group;

* **Hypothesis 3 e)**, which postulated that following intervention the post-test level of adequacy in the domain of Behavioral Conduct would be higher in the experimental than in the control group.

The following hypotheses were only confirmed to some extent:

* **Hypotheses 3 a), d)** and **f)** which postulated that following intervention the experimental group would show higher levels of adequacy than the control group in the domains of Scholastic Competence, Physical Appearance, and Global Self-Worth.

The following hypothesis was not supported:

* **Hypothesis 3 c)**, which postulated that following intervention the experimental group would show higher levels of adequacy in the domain of Athletic Competence than the control group.

In conclusion, the present study indicates that a group therapeutic intervention which employs creative media in integrating emotional, cognitive, and behavioral aspects of intervention may be useful in assisting socio-politically disadvantaged Coloured adolescents to cope with the many stresses in their daily lives. It would appear that standard, classroom input is not as effective as such an intervention programme in bringing about an improvement in psychological functioning.

It is submitted that the present study has some implications within the current South African context. Since the historic events of February 1990, it has been widely recognised that a "new South Africa" is imminent (Freeman, 1991). However, even if apartheid disappears from the statute books, the mark of this social system will undoubtedly be left on the psyche of present as well as future generations (Biesheuvel, 1991; Hayes, 1986). Several different solutions to the mental health problems in South Africa have been posited in the psychological and social work spheres. Of these suggestions, community psychology or community work has frequently been seen to be the most viable solution (Vogelman, 1986). A challenge has recently been made to mental health professionals to do something that will "tangibly" promote mental health in South Africa (Freeman, 1991). Acknowledging the presence of limitations, it is proposed that the findings of the present study have some implications in this regard. It is proposed that a school-based intervention of the nature implemented in the present study may go some way towards meeting the need for psychological intervention among socio-politically disadvantaged youths. The need for further research into, and development of, such a programme is acknowledged. It has been asserted that crises provide the potential for growth (Garmezy and Rutter, 1988). Typically such opportunities for growth are discussed in relation to those who suffer through the crises. It is proposed that in South Africa, opportunities for growth exist, not only for the victims of crisis but for those who intervene psychologically with these individuals.

There are those who argue that helping people to manage stress in more adaptive ways is counterproductive. They assert that it simply prolongs the life of the system which causes the stress in the first place (Dawes, 1985; Richman, 1986). A counter argument is that equipping individuals with coping tools need not imply acceptance of the status quo, but rather the empowerment of individuals so that they may challenge the roots of their problems (Perkel, 1988). Radical political and social transformation is a condition precedent to finally solving group mental health problems in South Africa. However, the present reality is that such change is happening slowly. Mental health professionals have an obligation to address the needs of the youths who are adversely affected by the current socio-political situation. This point is eloquently given expression to by Straker *et al.*(1988):

> **"...if in the fight against oppressive structures the suffering of the individual becomes inconsequential, then the essence of the task of the mental health worker is lost" (p.393).**

The emotional well-being of the majority of South African youth is gravely threatened. However, if steps are taken to explore and develop possible solutions to this seemingly insurmountable problem, then perhaps the future of South Africa can yet be salvaged.

APPENDICES

APPENDIX 1:
OUTLINE OF SESSIONS

SESSION ONE

Aims:

1. To allow everyone in the group to become acquainted and to share something about themselves with their fellow group members. Sharing is to be on a level that feels safe.

2. To introduce the programme and orientate the children to the way in which they will be working for the duration of the stress management programme.

3. To emphasize the importance of confidentiality, punctuality, regular attendance. To reiterate the place and time for meetings.

Session plan:

- Hand out name tags (previously made by the students at an earlier meeting.)

- Welcome everyone to the group.

- Exercise: Music is played and the children move in various ways, e.g: backwards, sideways, hopping, walking on toes,etc. (This exercise is intended to break the ice and to give the children an opportunity to get rid of excess energy so that they will be ready to settle down and concentrate on what is to follow.) At a given signal, they choose someone that they do not know very well to be their partner. In pairs, they tell each other a little about themselves. In addition they are asked to share with their partner where they would like to go if they had one wish. (The exercise is purposefully structured so as to contain the children who are likely to be somewhat anxious.) Everyone eventually forms a circle, therapist included, and each person introduces their partner to the group. The therapist begins to start the ball rolling.

- Still in the circle, the therapist tells the children the story of " The Baobabs ", taken from, " The Little Prince " by Antoine De Saint-Exupery (1974). Visual aids are used to enhance the impact of the story. On completion, the children are asked to discuss the message that the story conveys. Therapist encourages participation and responds in a non-judgemental manner.

- Therapist extrapolates, using the children's contributions, to the programme; that is, that the goal of the programme is to teach the children ways of coping with the various stresses in their lives. If they know how to approach various problem situations they will be in a position to address them early on so that theirproblems do not grow huge like the baobabs and tear them apart.

- Group discussion on what they consider to be constructive and destructive ways of coping.

- Group discussion on situations and issues that are likely to give rise to a need for constructive coping in their daily lives. A commitment on the part of the therapist and children to work together on these issues as well as those that emerged from their essays and drawings.

- The importance of those issues outlined in point three of the aims is emphasized.

SESSION TWO

Aims:

1. To introduce the basics of relaxation.

2. To facilitate the expression of feeling and catharsis through identification with central characters in the story told.

3. By way of group discussion, to normalise the presence of a range of emotions when one is faced with a stressful situation.

Session Plan:

- Relaxation exercise with visualisation as a warm up to the exercise to follow: Children lie on the floor and are made aware of their breathing by focusing on their breathing in and out. They are instructed to place their hands gently on their ribs. They imagine that their lungs are a balloon being filled with air. They need to feel this balloon filling out with their hands. This is repeated several times. Still breathing deeply the children are asked to close their eyes and imagine that they are a balloon floating in the sky, weightless. This is a special balloon that has eyes and can see all the clouds around it. They are asked to look at the shapes that the clouds make and distinguish pictures in the clouds. After several minutes the children sit up and in a group they relate which shape in the clouds they liked most. The therapist explains to the children that when one is stressed one becomes tense; relaxation and deep breathing may be used in such times of stress.

- Story-telling: "Unana and the Elephant" from "African Myths and Legends" by Arnott (1989). The therapist tells the story and at strategic points in the story, the children are invited to participate:

a). When the brother and sister are swallowed by the elephant: The children imagine that they are inside the stomach of the elephant. It's very noisy in the elephant's stomach so the children take out a piece of paper from their satchels and write to each other about the feelings that they are experiencing.

b). When Unana discovers the horrible fate of her children: The children imagine that they are a parent whose children have been swallowed by an elephant. They are asked to write down on paper the first thought that comes to their minds when they realise that they have to do something to save their children.

c). When Unana has been searching for her children for many hours, to no avail: The children are asked to put into words what a parent in this position might be feeling.

d). When Unana has eventually succeeded in freeing her children and all those caught in the elephants stomach: The children write down her feelings at this time.

- Once the story is completed, the children divide into small groups to discuss their experience. Those who wish to, may read what they wrote to the group.

- Representatives from the various groups feed back to the whole group the range of emotions experienced.

- The therapist directs the discussion so that the children are able to identify with trying and difficult situations in their own lives. That it is normal to experience a wide range of emotions in such situations is emphasized.

-Game: The children quiz the therapist on her ability to identify them without name-tags.

SESSION THREE

Aims:

1. To practice relaxation as a stress-management technique.

2. To facilitate emotional expression and catharsis. Achieved by way of pictures which serve as a stimulus and tap the central themes identified from an analysis of the children's drawings and essays. These include:

a. Conflicted relationships, ie: heterosexual, peer, family (sibling, parental and marital).

b. Violence and aggression within the home and social environment (including sexual abuse and rape.)

c. Substance abuse within the home and peer-group.

d. Issues relating to identity and self-esteem.

e. Depressive themes.

f. Poverty.

g. School related issues: academic, corporal punishment, issues with authority.

3. To encourage empathy as well as the courage toask for help.

Session Plan:

- Relaxation with visualisation as a warm-up exercise: As described in session two.

- A variety of pictures depicting various situations are laid out in the middle of the group. The children select a picture that appeals to them and, sitting on their own, create a story. Writing the story down is optional.

- In small groups, the children share their stories and discuss issues that arise.

- The children get into pairs and do a role-play. They imagine that they are the central character in their story. This character has a problem that is too large for him\her to cope with on her own. They select the character that they would turn to for help. The aggrieved character tells this person his\her woes. The "helper" listens first and then offers some advise. The children swop roles.

- The children de-role and discuss their experiences as both asker and giver of help.

SESSION FOUR

Aims:

1. To facilitate nonverbal expression and communication of feeling through movement and drawing.

2. To further encourage empathy.
3. To practice relaxation.

Session Plan:

- Relaxation and visualisation exercise: The children do deep breathing as described above (see session two). A further aspect of relaxation is introduced; namely that of tensing and relaxing different muscle groups. This is repeated several times. The children then imagine that they have climbed a tall mountain and are sitting at the top, relaxed and looking out over beautiful scenery. They are instructed to visualise clearly what they can see.

- Movement exercise involving tension and relaxation, anguish and relief: The children imagine that they are swimming blissfully in the sea. Suddenly they are confronted with a storm which creates huge waves. They struggle to stay above water. They are exhausted and frightened when they notice something in the distance. Using every ounce of energy, they swim towards this spec on the horizon and discover that it is a boat, they are safe! They get pulled aboard and sit quietly on board, breathing deeply and relaxing after their ordeal. Throughout this exercise only facial and body expression as well as sounds and verbal dynamics are allowed (Adapted from Ayalon, 1987, p.50).

- Story-telling: An adaptation of the story " The Valley of the Blind ", taken from " No-one is Alone " by Lahad (1989). The story contains adolescent themes of: separation, loss, need to assert one's own identity, and rebelling against enforced norms.

- The children are provided with large sheets of paper and are required to step into the character of Nonaz and to express what he is feeling in colours and images.

- In small groups, the children discuss their experience. The exercise will require group members to try and interpret each others drawings.

- A group discussion follows on what it is like to express feeling through drawing and movement.

SESSION FIVE

Aims:

1. To introduce "Stress Inoculation Training - ie: teaching the children to substitute negative self-statements with positive,coping ones.

2. To practice relaxation.

Session Plan:

- Relaxation and visualisation exercise: As in session four, except that the modality of music is introduced to enhance feelings of relaxation. The children are asked to visualize a situation that is positive or pleasant for them.

- Story-telling (Brief): "The Crow and the Pitcher" from "Aesop's Fables" (Eliot, 1909). Discussion of the underlying meaning in the story. This leads into discussion on how many times one says to oneself, "I can't!." A discussion of the circumstances under which this happens ensues.

- Educational input on how the way that one labels and evaluates a situation, profoundly influences one's emotions (Adapted from Ayalon, 1987, p.68).

- A common situation to most children is chosen as that to be worked on in the session, eg: exams. Children have to imagine themselves in a classroom waiting for the examination

paper to be handed out. They are asked to become acutely aware of thoughts and feelings that precede, accompany and follow the event and to write these down.

- The group will focus on a). controlling their physiological arousal by way of relaxation, and b).changing the negative self-statements that typically occupy their minds under stressful situations into more positive, affirming ones. Each child chooses statements with which they feel comfortable.

- Game: imaginative role-plays to help put positive self- statements into practice. Eg:

a. Brave explorer caught in a ravine.

b. Trapeze artist in the middle of his\her rope.

c. Fireman after an heroic rescue of a child from aburning house.

- Homework: To choose a situation and put what they learned during the session into practice.

SESSION SIX

Aims:

1. To teach problem solving skills.

2. To practice relaxation.

Session Plan:

- Relaxation exercise and warm-up, focusing on listening. Relaxation is as described in session five, with music to facilitate relaxation. The music is stopped and the children are asked to close their eyes and concentrate on the sounds around them. A group discussion on what was heard follows.

- Feedback on homework. The need to practice what is learnt is underscored.

- Story-telling: "Mutlane", taken from: "African Folktales for Children" by Leshoai (1990). The therapist tells the story. The children participate in the story, imagining that they are Mutlane caught in a cage by evil men.

- As an extension from the previous session, they are requested to suggest positive self-statements that he could use to calm himself.

- Educational input on the steps involved in problem solving. These are written on cardboard and placed where all children can see them (Steps taken from Ayalon, 1987, p. 70).

- In order to resolve his problem, Mutlane decides to pull out a piece of paper and a pencil from his rucksack. He first outlines the precise nature of his problem. He then writes down as many ideas as he can about how to save himself. The children do this exercise individually.

- The children form small groups and discuss their ideas. They have to choose which idea or combination of ideas is the best one. The children are instructed to ask themselves about the consequences (personal, social,short-term, long-term) of their solutions before making a final choice.

- The groups share their ideas and discuss them. They vote on the best solution offered by the group and discuss its merits.

- The session ends with a summary of the steps involved in the problem-solving process. The children are handed a typed copy of the steps to go over at home.

- Homework: To apply those steps to an outside situation and report back.

SESSION SEVEN

Aims:

1. To practice problem-solving skills.

2. To practice relaxation.

Session Plan:

- Relaxation exercise that includes a warm-up exercise which incorporates attention to detail: Relaxation is as described in session five. Once relaxed, the children are asked to visualise their favourite food, feel it and taste it. They describe their visualisation to the group in minute detail.

- Report back on homework.

- Exercise: "Magic Shop" (Adapted from Ayalon, 1987, p54.)

- Children are divided into two groups. One group becomes the "buyers" of solutions to problems, the other, the"sellers" of solutions.

- A magic shop is created in which the buyers think up a problem (one that is pertinent to their lives) and place a written version of it into a jar. The task of the sellers is to offer solutions to the buyers for a price. The buyer buys the best solution that is offered by the group of sellers. The seller who sells the most solutions wins a prize.

SESSION EIGHT

Aims:

1. To further put problem-solving into practice by way of role-play.

2. To practice relaxation.

Session Plan:

- Relaxation and visualisation exercise. Relaxation is as outlined in session five. The children visualise themselves in a difficult situation. They then imagine themselves dealing with the problem in a constructive and successful manner. A discussion follows.

- Based on the issues generated in session seven, the therapist creates "problem situations" on cards in preparation for a role-play. On the back of each card the major characters in the role-play are named. The children divide into small groups and have to solve the problem and then represent it in a role-play.

- The children observe the role-play and give constructive criticism about the way in which the problem situation was managed.

SESSION NINE

Aims:

1. To work on termination issues.

2. To practice relaxation.

Session Plan:

- Relaxation exercise: As outlined in session five.

- Story-telling: A story from "Bambi" by F. Sultan. (This story is adapted from Ayalon, 1987, p. 43). The central theme of the story is impending loss. The children are asked to participate, by way of free-writing, at various points in the story.

- They share their experiences in small groups. Their feelings vis-a-vis the story will be linked to their feelings around terminating the group.

- Following on from the above exercise, the children are requested to complete an essay entitled: "What I have gained and learnt from this experience". They are asked to include comments on what they found to be most beneficial, and what could have been included or changed to improve their experience. It is felt that such an exercise will assist the children in integrating their experience in the programme.

SESSION TEN

Aims:

1. To work on termination issues.

2. To practice relaxation.

Session Plan:

- Relaxation exercise: As described in session five.

- The stimulus pictures of the "Little Prince" from session one are shown and the children are asked to retell the story of the baobabs. A discussion of the underlying meaning of the story is held. The story is linked to what has been done in the course of the intervention programme. A group discussion follows in order to summarise what has been learnt about the consequences of stress and how one may deal with stress more effectively.

- Two cartoon-type drawings are handed out, the first one being that of a stressed individual whose every body part is labelled with physical and /or psychological symptoms of stress. The second drawing shows a coping individual smiling with his body made up of the various techniques and tools used in the programme to facilitate more adaptive coping. Discussion follows.

- A huge piece of cardboard, together with kokis, crayons, magazines and scissors, is provided. Working as a group, the children are asked to depict their experience in the stress management programme in the form of pictures, colours and words. In this way, a sense of closure may be achieved.

- When they have finished this task, the groups discuss their creation and their feelings around the intervention programme drawing to a close.

APPENDIX 2:
BRIEF PROCESS NOTES ON THE INTERVENTION IMPLEMENTED

It was observed that in the initial stages of the intervention programme that the participants were self-conscious and slightly reticent. It is felt that such reticence stemmed from unfamiliarity with such an intervention, as well as from the writer's being socially and culturally different from the children in the group. A lot of effort was expended in developing rapport with them. As the programme progressed, so they relaxed both with the writer and with each other. Throughout the programme, the writer acted as a facilitator of group activity. The writer's intention was to foster group cohesion among the children so that they would turn to each other as a source of support.

Typical of young adolescents, the boys and girls in the group started off by remaining very separate from one another. The girls came across as much more mature than the boys. The boys tended to ridicule the girls and often lapsed into giggles. In the course of the programme the boys and girls became increasingly comfortable with each other and a noticeable camaraderie emerged between them. They co-operated and worked well together. However, it should be noted that a division into "us and them" was not completely lost by the end of the programme. Throughout the programme, the girls overtly showed more enthusiasm and interest in the programme than the boys. They also exhibited a greater capacity to get in touch with and express emotions. The behaviour of the boys, who seemed to be extremely sensitive to peer pressure, was filled with inconsistencies. They exhibited bravado-filled behaviour and an "I don't care" attitude. However, an examination of the content of their writings, drawings and group discussions revealed the presence of interest in the programme. The positive feedback given to the writer on termination of the intervention programme reinforced the writer's impressions that the boys appreciated the sessions, yet felt embarrassed to reveal this to their peers for fear of ridicule. The observations made by the writer are consonant with writings on early adolescence (Blos, 1971,1979).

At first all the participants showed cautiousness and unfamiliarity with the mediums employed in the programme. As the programme unfolded, so they became emboldened and participated with confidence and interest. In particular, their use of fantasy and imagination improved, as did their ability to generate adaptive solutions to problem situations. From early on in the intervention programme, the adolescents displayed a remarkable sensitivity toward the feelings of others and toward the strengths and weaknesses in each other. Provided with an environment in which these skills were encouraged and rewarded, the writer noticed them progressively emerging and improving. It was encouraging to note that the participants would spontaneously employ what had been learnt in an earlier session in a subsequent one. This was reinforced by the writer.

The writer's subjective experience of the intervention programme was that it was enjoyable and satisfying for both the therapist and the adolescents. The adolescents seemed to find the programme helpful in numerous ways in various areas of their lives. By the end of the programme they had established themselves as a support group for each other. In addition, they had developed trust in the writer and felt safe to disclose sensitive feelings. It was with mutual sadness that the intervention programme was drawn to a close.

APPENDIX 3:
SYMPTOMS AND ATTITUDES MEASURED BY THE BDI

The twenty-one items on the BDI are designed to measure the following symptoms and attitudes:

1. Sadness
2. Pessimism/ Discouragement
3. Sense of Failure
4. Dissatisfaction
5. Guilt
6. Expectation of Punishment
7. Self-Dislike
8. Self-Accusation
9. Suicidal Ideation
10. Crying
11. Irritability
12. Social Withdrawal
13. Indecisiveness
14. Body Image Distortion
15. Work Retardation
16. Insomnia
17. Fatigability
18. Anorexia
19. Weight Loss
20. Somatic Preoccupation
21. Loss of Libido

APPENDIX 4:

BECK DEPRESSION INVENTORY

DIRECTIONS: READ EACH ITEM CAREFULLY AND CIRCLE THE NUMBER NEXT TO THE ANSWER THAT BEST REFLECTS HOW YOU HAVE BEEN FEELING DURING THE PAST FEW DAYS. MAKE SURE THAT YOU CIRCLE ONE ANSWER FOR EACH OF THE TWENTY-ONE QUESTIONS. IF MORE THAN ONE ANSWER APPLIES TO HOW YOU HAVE BEEN FEELING, CIRCLE THE HIGHER NUMBER. IF IN DOUBT, MAKE YOUR BEST GUESS SO AS NOT TO LEAVE ANY QUESTION UNANSWERED.

1. 0. I do not feel sad
   1. I feel sad
   2. I am sad all the time and can't snap out of it
   3. I am so sad or unhappy that I can't stand it

2. 0. I am not particularly discouraged about the future
   1. I feel discouraged about the future
   2. I feel I have nothing to look forward to
   3. I feel that the future is hopeless and that things cannot improve

3. 0. I do not feel like a failure
   1. I feel I have failed more than the average person
   2. As I look back on my life, all I can see is a lot of failures
   3. I feel I am a complete failure as a person

4. 0. I get as much satisfaction out of things as I used to

1. I don't enjoy things the way I used to

2. I don't get real satisfaction out of anything anymore

3. I am dissatisfied or bored with everything

5. 0. I don't feel particulary guilty

1. I feel guilty a good part of the time

2. I feel guilty most of the time

3. I feel guilty all the time

6. 0. I don't feel I am being punished

1. I feel that I may be punished

2. I expect to be punished

3. I feel I am being punished

7. 0. I don't feel disappointed in myself

1. I am disappointed in myself

2. I am disgusted with myself

3. I hate myself

8. 0. I don't feel I am worse than anybody else

1. I am critical of myself for my weaknesses or mistakes

2. I blame myself all the time for my faults

3. I blame myself for everything bad that happens

9. 0. I don't have any thoughts of killing myself

1. I have thoughts of killing myself, but I would not carry them out

2. I would like to kill myself

3. I would kill myself if I had the chance

10. 0. I don't cry any more than usual

1. I cry more now than I used to

2. I cry all the time

3. I used to be able to cry, but now I can't cry even though I want to

11. 0. I am no more irritated by things than I ever am

1. I am slightly more irritated now than usual

2. I am quite annoyed or irritated a good deal of the time

3. I feel irritated all the time now

12. 0. I have not lost interest in other people

1. I am less interested in other people than I used to be

2. I have lost most of my interest in other people

3. I have lost all of my interest in other people

13. 0. I make decisions as well as I ever could

1. I put off making decisions more than I used to

2. I have greater difficulty in making decisions than before

3. I can't make decisions at all anymore

14. 0. I don't feel that I look worse than I used to

1. I am worried that I am looking unattractive

2. I feel that there are permanent changes in my appearance that make me look unattractive

3. I believe that I look ugly

15. 0. I can work as well as before

1. It takes an extra effort to get started at doing something

2. I have to push myself very hard to do anything

3. I can't do any work at all

16. 0. I can sleep as well as usual

1. I don't sleep as well as I used to

2. I wake 1-2 hours earlier than usual and find it hard to get back to sleep

3. I wake up several hours earlier than I used to and cannot get back to sleep

17. 0. I don't get more tired than usual

1. I get tired more easily than I used to

2. I get tired from doing almost nothing

3. I am too tired to do anything

18. 0. My appetite is no worse than usual

1. My appetite is not as good as it used to be

2. My appetite is much worse now

3. I have no appetite at all anymore

19. 0. I have not lost much weight, if any, lately

1. I have lost more than five pounds

2. I have lost more than ten pounds

3. I have lost more than fifteen pounds

20. 0. I am no more worried about my health than usual

1. I am worried about physical problems such as aches and pains, or upset stomach, or constipation

2. I am very worried about my physical problems and it's hard to think of much else

3. I am so worried about my physical problems that I cannot think about anything else

21. 0. I have not noticed any recent changes in my interest in romantic relationships

1. I am less interested in romantic relationships than I used to be

2. I am much less interested in romantic relationships now

3. I have lost interest in romantic relationships completely

****

THE STATE-TRAIT ANXIETY INVENTORY-FORM Y

SELF-EVALUATION QUESTIONNAIRE

Developed by Charles D. Spielberger
in collaboration with
R. L. Gorsuch, R. Lushene, P. R. Vagg, and G. A. Jacobs

STAI Form Y-1

Name _____ Date _____ S ___

Age _____ Sex: M ___ F ___

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1. I feel calm	○	○	○	○
2. I feel secure	○	○	○	○
3. I am tense	○	○	○	○
4. I feel strained	○	○	○	○
5. I feel at ease	○	○	○	○
6. I feel upset	○	○	○	○
7. I am presently worrying over possible misfortunes	○	○	○	○
8. I feel satisfied	○	○	○	○
9. I feel frightened	○	○	○	○
10. I feel comfortable	○	○	○	○
11. I feel self-confident	○	○	○	○
12. I feel nervous	○	○	○	○
13. I am jittery	○	○	○	○
14. I feel indecisive	○	○	○	○
15. I am relaxed	○	○	○	○
16. I feel content	○	○	○	○
17. I am worried	○	○	○	○
18. I feel confused	○	○	○	○
19. I feel steady	○	○	○	○
20. I feel pleasant	○	○	○	○

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SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-1

Name _____ Date _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	○	○	○	○
22. I feel nervous and restless	○	○	○	○
23. I feel satisfied with myself	○	○	○	○
24. I wish I could be as happy as others seem to be	○	○	○	○
25. I feel like a failure	○	○	○	○
26. I feel rested	○	○	○	○
27. I am calm, cool, and collected	○	○	○	○
28. I feel that difficulties are piling up so that I cannot overcome them	○	○	○	○
29. I worry too much over something that really doesn't matter	○	○	○	○
30. I am happy	○	○	○	○
31. I have disturbing thoughts	○	○	○	○
32. I lack self-confidence	○	○	○	○
33. I feel secure	○	○	○	○
34. I make decisions easily	○	○	○	○
35. I feel inadequate	○	○	○	○
36. I am content	○	○	○	○
37. Some unimportant thought runs through my mind and bothers me	○	○	○	○
38. I take disappointments so keenly that I can't put them out of my mind	○	○	○	○
39. I am a steady person	○	○	○	○
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	○	○	○	○

APPENDIX 6:
SELF-PERCEPTION PROFILE FOR CHILDREN

Instructions

INSTRUCTIONS TO THE CHILD:

We have some sentences here and, as you can see from the top of your sheet where it says "What I am like," we are interested in what each of you is like, what kind of a person you are like. This is a survey, *not* a test. There are no right or wrong answers. Since kids are very different from one another, each of you will be putting down something different.

First let me explain how these questions work. There is a sample question at the top, marked (a). I'll read it outloud and you follow along with me. (Examiner reads sample question.) This question talks about two kinds of kids, and we want to know which kids are most like *you*.

(1) So, what I want you to decide first is whether *you* are more like the kids on the left side who would rather play outdoors, or whether you are more like the kids on the right side who would rather watch T.V. Don't mark anything yet, but first decide which kind of kid is *most like you*, and go to that side of the sentence.

(2) Now, the *second* thing I want you to think about, now that you have decided which kind of kids are most like you, is to decide whether that is only *sort of true for you, or really true for you*. If it's only sort of true, then put an X in the box under sort of true; if it's really true for you, then put an X in that box, under really true.

(3) For each sentence you only check one box. Sometimes it will be on one side of the page, another time it will be on the other side of the page, but you can only check *one box* for each sentence. You *don't* check both sides, just the *one* side most like you.

(4) OK, that one was just for practice. Now we have some more sentences which I'm going to read out loud. For each one, just check one box, the one that goes with what is true for you, what you are most like.

The Test

What I Am Like

Name _____ Age _____ Birthday _____ Group _____
Month Day

Boy or Girl (circle which)

SAMPLE SENTENCE

	Really True for me	Sort of True for me			Sort of True for me	Really True for me
(a)	☐	☐	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V. or read a book inside	☐	☐
1.	☐	☐	Some kids feel that they are very *good* at their school work	BUT	Other kids *worry* about whether they can do the school work assigned to them.	☐	☐
2.	☐	☐	Some kids find it *hard* to make friends	BUT	Other kids find it's pretty *easy* to make friends.	☐	☐
3.	☐	☐	Some kids do very *well* at all kinds of sports	BUT	Other kids *don't* feel that they are very good when it comes to sports.	☐	☐
4.	☐	☐	Some kids are *happy* with the way they look	BUT	Other kids are *not* happy with the way they look.	☐	☐
5.	☐	☐	Some kids often do *not* like the way they *behave*	BUT	Other kids usually *like* the way they behave.	☐	☐
6.	☐	☐	Some kids are often *unhappy* with themselves	BUT	Other kids are pretty *pleased* with themselves.	☐	☐
7.	☐	☐	Some kids feel like they are *just as smart* as as other kids their age	BUT	Other kids aren't so sure and *wonder* if they are as smart.	☐	☐
8.	☐	☐	Some kids have *alot* of friends	BUT	Other kids *don't* have very many friends.	☐	☐

	Really True for me	Sort of True for me			Sort of True for me	Really True for me
9.	☐	☐	Some kids wish they could be alot better at sports	BUT	Other kids feel they are good enough at sports.	☐	☐
10.	☐	☐	Some kids are *happy* with their height and weight	BUT	Other kids wish their height or weight were *different.*	☐	☐
11.	☐	☐	Some kids usually do the *right* thing	BUT	Other kids often *don't* do the right thing.	☐	☐
12.	☐	☐	Some kids *don't* like the way they are leading their life	BUT	Other kids *do* like the way they are leading their life.	☐	☐
13.	☐	☐	Some kids are pretty *slow* in finishing their school work	BUT	Other kids can do their school work *quickly.*	☐	☐
14.	☐	☐	Some kids would like to have alot more friends	BUT	Other kids have as many friends as they want.	☐	☐
15.	☐	☐	Some kids think they could do well at just about any new sports activity they haven't tried before	BUT	Other kids are afraid they might *not* do well at sports they haven't ever tried.	☐	☐
16.	☐	☐	Some kids wish their body was *different*	BUT	Other kids *like* their body the way it is.	☐	☐
17.	☐	☐	Some kids usually *act* the way they know they are *supposed* to	BUT	Other kids often *don't* act the way they are supposed to.	☐	☐
18.	☐	☐	Some kids are *happy* with themselves as a person	BUT	Other kids are often *not* happy with themselves.	☐	☐
19.	☐	☐	Some kids often *forget* what they learn	BUT	Other kids can remember things *easily.*	☐	☐
20.	☐	☐	Some kids are always doing things with *alot* of kids	BUT	Other kids usually do things *by themselves.*	☐	☐

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
21.	☐	☐	Some kids feel that they are *better* than others their age at sports	**BUT**	Other kids *don't* feel they can play as well.	☐	☐
22.	☐	☐	Some kids wish their physical appearance (how they look) was *different*	**BUT**	Other kids *like* their physical appearance the way it is.	☐	☐
23.	☐	☐	Some kids usually get in *trouble* because of things they do	**BUT**	Other kids usually *don't* do things that get them in trouble.	☐	☐
24.	☐	☐	Some kids *like* the kind of *person* they are	**BUT**	Other kids often wish they were someone else.	☐	☐
25.	☐	☐	Some kids do *very well* at their classwork	**BUT**	Other kids *don't* do very well at their classwork.	☐	☐
26.	☐	☐	Some kids wish that more people their age liked them	**BUT**	Other kids feel that most people their age *do* like them.	☐	☐
27.	☐	☐	In games and sports some kids usually *watch* instead of play	**BUT**	Other kids usually *play* rather than just watch.	☐	☐
28.	☐	☐	Some kids wish something about their face or hair looked *different*	**BUT**	Other kids *like* their face and hair the way they are.	☐	☐
29.	☐	☐	Some kids do things they know they *shouldn't* do	**BUT**	Other kids *hardly ever* do things they know they shouldn't do.	☐	☐
30.	☐	☐	Some kids are very *happy* being the way they are	**BUT**	Other kids wish they were *different.*	☐	☐
31.	☐	☐	Some kids have *trouble* figuring out the answers in school	**BUT**	Other kids almost *always* can figure out the answers.	☐	☐
32.	☐	☐	Some kids are *popular* with others their age	**BUT**	Other kids are *not* very popular.	☐	☐

	Really True for me	Sort of True for me			Sort of True for me	Really True for me
33.	☐	☐	Some kids *don't* do well at new outdoor games	BUT	Other kids are *good* at new games right away.	☐	☐
34.	☐	☐	Some kids think that they are good looking	BUT	Other kids think that they are not very good looking.	☐	☐
35.	☐	☐	Some kids behave themselves very well	BUT	Other kids often find it hard to behave themselves.	☐	☐
36.	☐	☐	Some kids are not very happy with the way they do alot of things	BUT	Other kids think the way they do things is *fine*.	☐	☐

APPENDIX 7:

BIOGRAPHICAL QUESTIONNAIRE

THE FOLLOWING QUESTIONS ARE TRYING TO GIVE A PICTURE OF YOUR FAMILY AND YOUR HOME. PLEASE PUT YOUR ANSWERS TO EACH QUESTION IN THE SPACE PROVIDED NEXT TO THAT QUESTION.

1. Name: _____

2. Number: _____

3. Age: _____

4. Your Birth Date (Day, Month, Year): ___/___/___

5. Standard at school: _____

6. Sex (male or female): _____

7. Home Area: _____

8. Home Language (ie:first language) _____

9. What is your parents' marital status? Please circle either a, b, c, d or e.

a. Never married

b. Married

c. Widowed

d. Divorced

e. Separated

10. What level of education does your Father/ Step-Father/ Father substitute have? (Eg: last standard passed at school, highest diploma or degree.) _____

_____

11. What level of education does your Mother/ Step-Mother/ Mother substitute have? (Eg: last standard passed at school, highest diploma or degree.) _____

_____

12a. What is your Father/ Guardian's occupation?_____

b. What type of work does he actually do?_____

13a. What is your Mother/ Guardian's occupation?_____

b. What type of work does she actually do?_____

14. How many members of <u>your family</u> live in your home with you <u>all or most of the time?</u> _____

15. Please state who they are and indicate their age (Eg: Father, 40 years; Grandmother, 80 years; Brother, 6 years):_____

16. How many people who are <u>not members of your family</u> also live in your home <u>all or most of the time?</u>_____

17. Please state who they are and indicate their age:_____

18. Do you live. (Please circle either a., b., or c.)

a. In your own house?

b. In a flat?

c. In rooms in someone else's house?

d. Other (Please specify) _____

_____

19. Circle which of the following facilities are present in the area where you live.

a. Hot and cold water

b. Cold water only

c. Electricity

d. Toilet inside

e. Toilet outside

f. Communal toilet (inside or outside the dwelling)

g. Tarred roads

h. Untarred roads

APPENDIX 8:
LETTER TO PARENTS

Dear Parents,

I am a clinical psychologist from the University of the Witwatersrand. In order to complete my Masters degree, I am carrying out some research. I am interested in working with children within the 13 - 14 year old age group. The aim of my research project is to teach these children useful ways of coping with the stress and difficulties in their daily lives. If children feel that they can cope with stress they feel better about themselves. Further, they have more energy to concentrate on their school work.

Please note that the project is not only being carried out for degree purposes. It is hoped that as a result of the project a coping skills programme will be introduced into the school curriculum in an ongoing way. In this way, the results of this research will benefit Coronationville Highschool and the children that attend it.

I will be selecting 32 children from the standard 6 classes to take part in this project. I will be working with these children after school, twice a week, for one hour and fifteen minutes. The project will run from early in the third term until the end of August.

I need your permission as parents to work with your children for the period stated above. The group of children will be selected once the reply slip at the bottom of this letter has been filled in and returned. Please fill in the reply slip and return this letter to your child's class teacher as soon as possible. Your cooperation and interest will be greatly appreciated.

Yours Sincerely

Ms. Linda Braun
(Intern Clinical Psychologist)

Mr. Matsepe
(Principal)

REPLY SLIP

I, Mr/Mrs/Miss_____ give my permission/do not give my permission (please circle the answer that applies to you) for_____(please state child's name) in class_____(please state the class that your child is in) to take part in the research project to be run by Ms. Braun in the second term. If my child is selected for this project, arrangements will be made for him/her to attend the programme regulary.

Signed_____

APPENDIX 9:

MEANS, SD'S AND SAMPLE SIZES OF ALL MEASURES ON ORIGINAL AND MODIFIED GROUPS

Table A.1

Means, SD's and Sample Sizes of Pre-test Scores on the BDI, and STAI for the Experimental and Control Groups Before and After Removal of Extreme Scores, With Those Scores That Were Removed Marked With An Asterisk

	BDI		STAI-State		STAI-Trait	
	Exp.	Control	Exp.	Control	Exp.	Control
	32*			38	61*	40
	45*			36	65*	40
	14		37	42	41	42
	4	6	46	32	41	35
	28*	7	56	34	59*	40
	14	25	25	53	43	52
	19*	15	67*	48	63*	50
	11	6	26	37	34	40
	15	24	29	87	33	47
	26	15	48	35	50	30
	11	12	47	30	41	48
	32*	8	32	45	44	43
Mean 1	21.75	12.33	44.92	38.92	47.92	41.92
SD	11.96	6.71	15.15	6.82	11.35	6.11
Mean 2	13.57	12.33	38.44	38.92	40.87	41.92
SD	7.14	6.71	11.17	6.82	5.44	6.11
N*	N=7	N=12	N=9	N=12	N=8	N=12

NOTE:

Mean 1 = Original mean
Mean 2 = Mean with extreme scores removed

* = Extreme scores removed for Mean 2

N* = Sample size after removal of extreme scorers. If no scores were removed, the sample size for the experimental and control groups remained as before (N=12).

Table A.2

Means, SD's, and Sample Sizes of Pre-test Scores on the SPPC Subscales of Scholastic Competence, Social Acceptance, and Athletic Competence for the Experimental and Control Group Before and After Removal Of Extreme Scores, With Those Scores That Were Removed Marked With an Asterisk

	SPPC 1		SPPC 2		SPPC 3	
	Exp.	Control	Exp.	Control	Exp.	Control
	1.83	3.00	1.83	3.00	2.67	1.00*
	2.67	2.67	3.00	2.50	2.50	1.83
	3.17	3.33	2.00	2.67	1.83	1.67
	1.67	2.67	3.00	2.50	2.50	1.83
	1.17	1.33	1.83	1.50	2.67	1.33*
	2.67	1.00	2.33	3.33	2.00	1.83
	1.50	2.50	1.50*	3.17	1.50	1.67
	3.00	3.33	3.17	3.67*	2.67	3.50*
	3.50	2.50	2.67	2.33	2.33	2.83
	3.67*	3.17	1.67	2.83	2.83	2.50
	3.67*	2.17	1.33*	2.83	2.17	1.67
	2.50	1.50	1.00*	2.00	2.17	2.67
Mean 1	2.59	2.43	2.11	2.69	2.32	2.03
SD	0.87	0.79	0.72	0.59	0.40	0.71
Mean 2	2.37	2.43	2.39	2.61	2.32	2.06
SD	0.78	0.79	0.58	0.53	0.40	0.47
N*	N=10	N=12	N=9	N=11	N=12	N=9

NOTE:

SPPC 1 = Scholastic Competence
SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence

Mean 1 = Original mean
Mean 2 = Mean with extreme scores removed

* = Extreme scores removed for Mean 2.

N* = Sample size after removal of extreme scorers. If no scores were removed, the sample size for the experimental and control groups remained as before (N=12)

Table A.3

Means, SD's and Sample Sizes of Pre-test Scores on the SPPC Subscales of Physical Appearance, Behavioral Conduct, and Global Self-Worth for the Experimental and Control Groups Before and After Removal Of Extreme Scores, With Those Scores That Were Removed Marked With an Asterisk

	SPPC 4		SPPC 5		SPPC 6	
	Exp.	Control	Exp.	Control	Exp.	Control
	3.00	1.00	1.83	2.67	2.33	2.67
	1.17	3.00	3.17	3.67	2.17	3.50
	1.17	3.00	3.33	3.50	2.83	3.17
	3.00	2.33	2.50	3.33	3.00	3.17
	3.17	3.33	2.17	3.17	1.83	2.50
	3.50	3.50	3.33	2.17	3.50	2.50
	1.33	3.00	1.33*	2.00	1.50*	3.50
	1.83	3.50	2.00	2.00	2.67	3.00
	1.50	1.67	3.50	2.33	2.50	2.17
	2.33	3.50	1.33*	2.33	2.50	3.33
	3.83*	2.83	3.17	3.33	2.83	3.83
	1.50	3.50	2.83	2.83	2.33	2.00
Mean 1	2.28	2.85	2.54	2.78	2.50	2.94
SD	0.98	0.80	0.70	0.61	0.53	0.57
Mean 2	2.14	2.85	2.78	2.78	2.59	2.94
SD	0.89	0.80	0.61	0.61	0.45	0.57
N*	N=11	N=12	N=10	N=12	N=11	N=12

NOTE:

SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct
SPPC 6 = Global Self-Worth

Mean 1 = Original Mean
Mean 2 = Mean with extreme scores removed

* = Extreme scores removed

N* = Sample size after removal of extreme scorers. If no scores were removed, the sample size for the experimental and control groups remained as before (N=12)

Table A.4

Pre-test and Post-test Means and Standard Deviations on all Measures for the Experimental and Control Groups on the Modified Sample Sizes

	PRE-TEST				POST-TEST			
	Mean		SD		Mean		SD	
Test	Exp. N=12	Contr-ol N=12	Exp. N=12	Contr-ol N=12	Exp. N=12	Contr-ol N=12	Exp. N=12	Cont-rol N=12
BDI	13.57	12.33	6.60	6.71	7.14	14.08	5.24	7.39
STAI-A	38.44	38.92	11.17	6.82	30.89	38.75	6.86	5.08
STAI-B	40.87	41.92	5.44	6.11	32.25	42.50	7.13	5.21
SPPC 1	2.37	2.43	0.78	0.79	2.75	2.73	0.54	0.64
SPPC 2	2.39	2.61	0.58	0.53	3.20	2.47	0.44	0.49
SPPC 3	2.32	2.06	0.40	0.47	2.38	2.00	0.38	0.47
SPPC 4	2.14	2.85	0.89	0.80	2.59	2.76	0.94	0.82
SPPC 5	2.78	2.78	0.61	0.61	3.17	2.60	0.35	0.47
SPPC 6	2.59	2.94	0.45	0.57	3.29	2.89	0.42	0.51

NOTE:

SPPC 1 = Scholastic Competence
SPPC 2 = Social Acceptance
SPPC 3 = Athletic Competence
SPPC 4 = Physical Appearance
SPPC 5 = Behavioral Conduct
SPPC 6 = Global Self-Worth

STAI-A = State-Anxiety
STAI-B = Trait-Anxiety

APPENDIX 10:

PROFILES OF THREE SUBJECTS ON THE DRAWING, ESSAY AND FEEDBACK TASKS

The protocols of three subjects were selected for presentation. The first two protocols are those of females, the final one is that of a male. All three subjects were in the experimental group.

Subject One

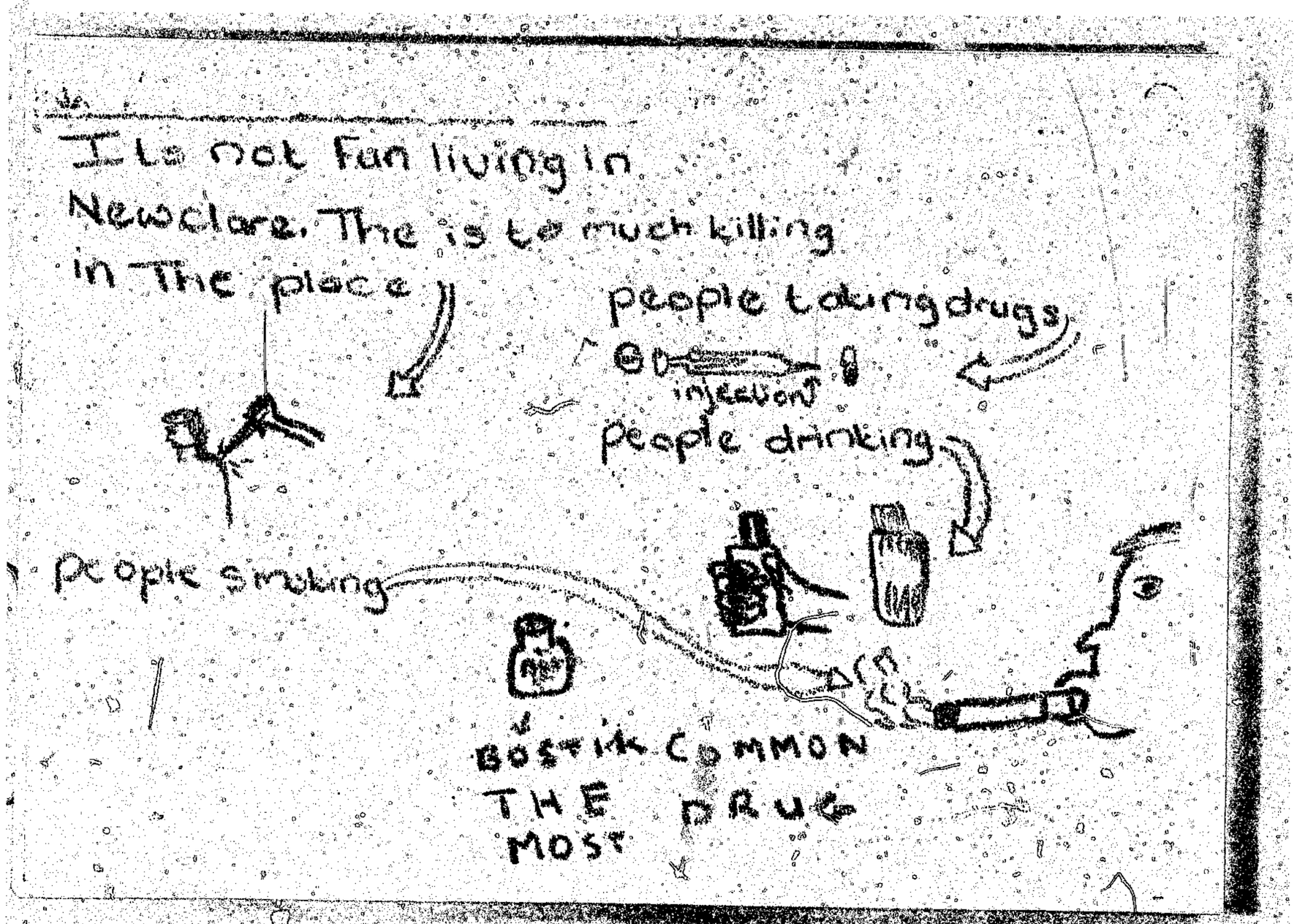
ESSAY

Fomily proders

Problems about my uncle at home. I worry alot about what is going to happen about be me and my brother. My uncle is staying with us for elevan years, worked for 6 years and he isnt working for six years now. He hits us, shouts just like he wants to. He rules and regulates us. My mother spoils him and does not think about her four children that is still living in the house.

Sometimes I think of running away from home or commiting succsite.

I do not fun living in
Newclare. The is to much killing
in The place



FEEDBACK

WHAT I HAVE LEARNT AND GAINED FROM THIS EXPERIENCE

NOTE: Once you have responded to the above, please include comments on:

1) What you found to be most beneficial

2) What could have been included or changed to improve your experience

Dearest Linda,

The letter that I'm writing is to tell you how much I have learnt from you. It was was very helpful to me. It helped me alot to calm myself from my parents. I therefore feel that I had enjoyed been by the stress class. It helped me to communicate with with people. It help me with my school work and many other things.

I found it most beneficial to work together as a group and what you have tought us was very interesting and helpful and it was also very important ware to [illegible] you have learnt us and I really liked it and to work with you was the best of all.

Well Nothing could be included to the program that we all have attended and I would just like to tell you that you are the best

Wish you Good luck for the rest of your time and also hope to see you again.

From your Dearest Friend ....

Subject Two

ESSAY

My problem is ms Loonatic she gives the glass to much homework and that does not give me enough ~~we~~ time to do my other homewor

I get very worried about my mother, because my mother has this cough, so when she coughs than she has difficulty breathing so it worrys me My father past away 6 years ago so I am afraid of lossing my moth-er.

I am worried about my cousin Natasha because she has a problem with her father, so I im afraid because it still worrys her alot. He has done something to her that still hurts her. And she can't stop thinking about it.

People being stabed.

a gang of boys that like to worry girls.

NO LEAVE ME ALONE. PLEASE!

COME HERE !!!

Boys" draging girls arround

LETS Run here they coming!!

Sometimes there are Happy moments, not always, if you know them they wont worry you

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FEEDBACK

WHAT I HAVE LEARNT AND GAINED FROM THIS EXPERIENCE

NOTE: Once you have responded to the above, please include comments on:

1) What you found to be most beneficial

2) What could have been included or changed to improve your experience

I have learnt that a person does not run away from your problems, eg: drugs, etc.
I have experienced a hole knew way of how to deal with my problems.
I have gained back my self confidence and my respect for myself.

Telling you my problems or writting it down so you could help me solve it and no-one else finding out and learning how to cope with my problems not hiding it away.

Telling the children about other problems, without mensioning names so you could have asked them what they would have done.
But only with the persons permision.
But I thank you for what you've done helping me, and my cousin.

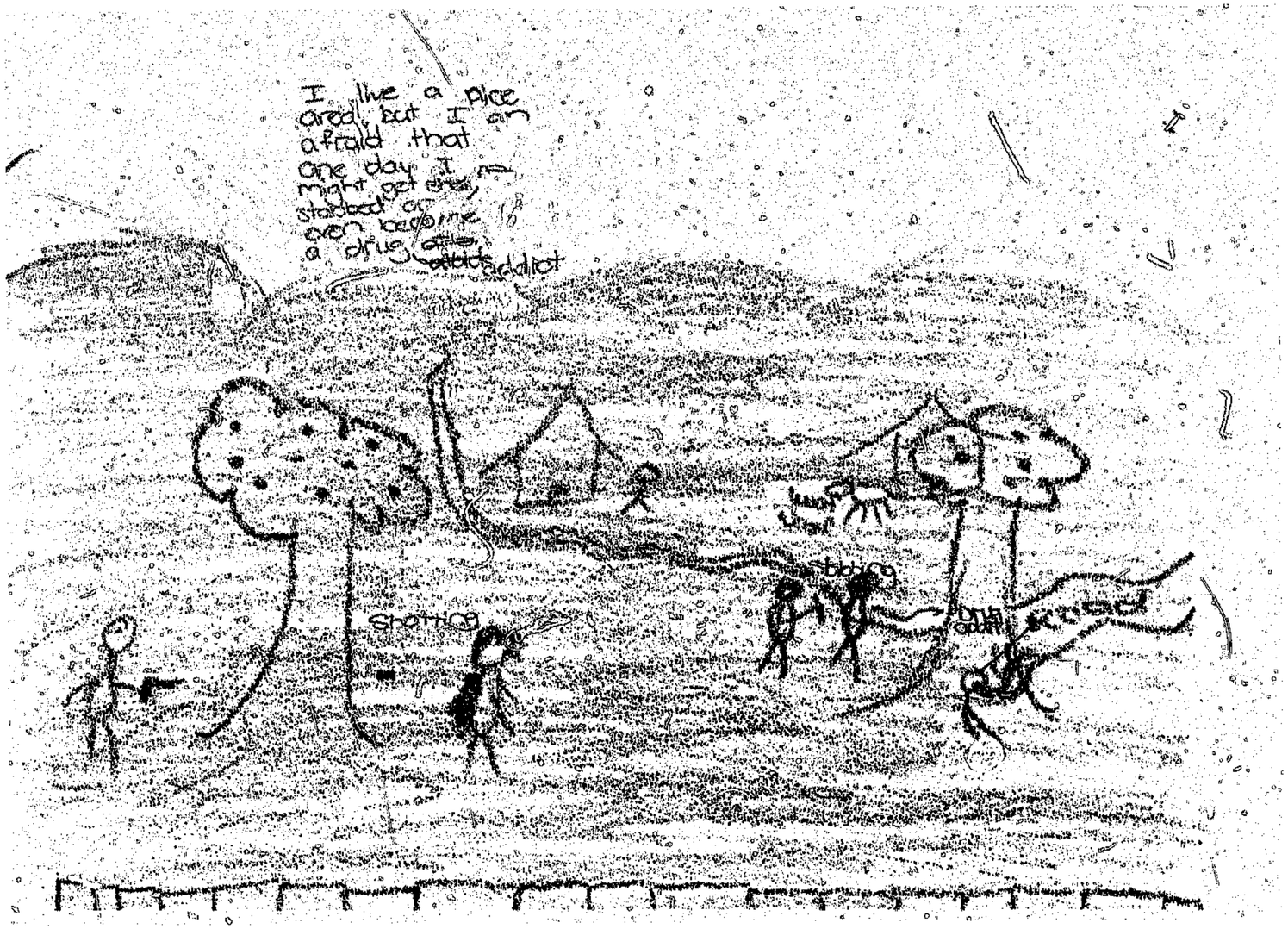
Subject Three

ESSAY

① one subjects Woodwork.
The reason why I do not like the subject is because of the the teacher, I am not the only one who does not like the sir it is that he always hits a person. Sometimes he has a reason and sometimes he does not eg. yesterday he hit the whole class just because he found a paper on the desk. Some boys went to principal and he found out and he is hitting all that those that went. (He tells us to bring our drawings which already bear marked) ② Another thing is the stick that he uses, is not a stick, it is a plank. ③ yesterday he ~~tretc~~ threatened us he said if we report him he will get us during the year.

That is about my only problem.

This is a problem which I don't like to talk about. In the neighbourhood where I stay they is a person murdered almost every day and I am afraid of what might happen to me & my family. I could get murdered next but I am afraid.


I live a nice area, but I am afraid that one day I may might get shot, stabbed or even become a drug addict
shotted
stabbed
Drug addict
Dead

FEEDBACK

WHAT I HAVE LEARNT AND GAINED FROM THIS EXPERIENCE

NOTE: Once you have responded to the above, please include comments on:

1) What you found to be most beneficial

2) What could have been included or changed to improve your experience

Dear Linda (I hope it's spelt right)
The thing that I find most educational about the S.M.P (Stress management program) is that I have learn to believe in myself, Talk to someone if I have a problem. I enjoy these classes ~~are~~ ~~extremely~~ lot.
To believe in yourself
Nothing to be right like it is.

Nice knowing you.

NB
Please do not take notice of my bad writing (I

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