

**TOPIC: FACTORS ASSOCIATED WITH STRESS
AMONG STUDENTS ATTENDING HIGH
SCHOOL IN THE MMABATHO REGION**

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DECLARATION

I declare that the thesis for the degree M. Soc. Sc. (Clinical Psychology) at the University of the North West, hereby submitted, has not previously been submitted by me for a degree at this or any other University, that it is my own work in design and execution. Material taken from other sources contained herein has been acknowledged and permission has been obtained where necessary.

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ABSTRACT

The objective of the present study was to explore factors associated with stress among students from three high schools in grades eleven and twelve, in the Mafikeng area.

A survey design was conducted in which questionnaires were the primary source of data collection. The sample consisted of 120 students (40 from each school) who were randomly selected from the class register. However there was a balance for gender, thus equal number of males and females were chosen from both grades eleven and twelve from each school.

Generally learners at the three schools showed a low level of anxiety, strain and stress as their level of coping was high. The results indicated that there was a negative correlation for satisfaction with life and the student's mood profile as well as their strain response indicating that a correlation of - 0.195 and - 0.207 respectively existed. Findings also indicated that students who have high coping skills (56%) also have a high satisfaction with life. It was also clear from the findings that 73% of students have high coping skills when cross tabulated with their strain response and a profile of their moods, in comparison with 27% of students with low coping skills.

Overall the study elicited that students who had the ability to cope with stress through various mechanisms had low strain and positive mood profile.

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CHAPTER 1

INTRODUCTION

There have been many studies conducted on stress related to the corporate world, crime, rape and drugs. However there is limited knowledge on factors associated with stress among students attending high school. This research will focus on the factors related to stress that high school student's encounter in their daily life.

The quality of the biosphere in which we live is declining rapidly. Our society and our life styles are aimed towards embracing material goods, conveniences," the good life", and we reward competition and achievement above most other endeavours in our life. (Adam, 1980)

General research on stress is in abundance; in fact research exploring the phenomenon of stress has developed extensively over the past decades. Studies conducted have stemmed from different sources namely, theory, research and treatment from a broad spectrum including social, behavioural, psychoanalytic and the physiological perspectives.

For most people a stressful event is thought of as something undesirable or threatening. A psychological definition of stress is "a state where the well-being (or integrity) of an individual is endangered and he must devote all of his

energies to its protection" (Cofer & Appley, 1964: 463). The key component in making a life event stressful is its ability to change an individual's usual activities, and not its desirability or undesirability. In the case of the students, stress can be categorised into four elements: feeling threatened, need for action, uncertainty and emotional response with anxiety or fear as core emotions. Furthermore several factors makeup the psychosocial stress of the students: lack of control, insecurity, unpredictability of the future, lowered self esteem, generalised demoralisation and fragmented social support system.

Social support is an adept example in the reduction of stress. Social support can be seen as a mediator or moderator of stress. As a mediator, social support would be a benefit under all circumstances to this extent. Appley & Trumbull, (1986: 55) comment "Unstressed people with social support would be in better shape than unstressed people without social support, and stressed people with social support would be in better shape than stressed people without social support". When looking at social support as a moderator it is viewed as a factor that improves the negative effects of stress, although it has no effect when stress is not present.

Adolescence is often a controversial stage of development replete with the complications of life in the 21st century. In addition to identity definition the adolescent in high school has to deal with a competitive world, which has specific definitions of success and shuns failure. It is thus important to find out how

adolescents negotiate the terrain in which they live. The main objective of this study is to attempt to understand the world of an adolescent in predominantly black schools of Mmabatho.

This research was conducted firstly to make the general public aware of the different problems experienced by the students. Secondly, the factors associated with stress would be highlighted so as to bring about awareness and support for the students to reduce their stress.

As a result of discovering stress affecting the students, teachers may send students that need help for therapy where stress management can be discussed and the student provided with coping skills. In focusing solely on three schools in and around the Mmabatho area, the study was to lay the foundation for future research in this area, which could include the whole of the North West Province and eventually the entire country.

Problem statement

Most people do not adequately mobilise themselves to deal with stress, unless their present life styles are threatened (Adam, 1980). Recently in the Mmabatho area there has been an increasing number of suicides amongst high school students. Press reports (from the local newspaper The Mail, 1999) allude to the fact that the circumstances under which adolescent suicides were committed remain unclear. Thus one of the primary functions of this study is to answer the

question – What are the factors associated with stress and how high or low is student's level of coping?

Another function of this study is to provide information to principals, teachers and parents making them aware of the possible consequences of stress and how to help students cope with it.

Objectives of the study

The study aims at exploring the factors associated with stress experienced by students in three high schools from grades eleven and twelve located in and around the capital city of Mmabatho in the North West Province. The schools are located in three distinctive areas namely rural (Mococe High School, 35KM from the city centre), peri-urban (Leteane High School, 21 KM from the city centre) and urban (Mmabatho High School). In terms of the manner in which this research was conceptualised, a research of this nature would identify the following objectives:



- Identify the relationship among Strain Response, Satisfaction with Life Scale, Cope, Profile of Mood States and State – Trait Anxiety Inventory.
- Examine the relationship between demographic variables such as religion and Satisfaction with Life.
- Identify the relationship among Strain Response, Profile of Moods and the Cope Score.

- Identify the relationship between the Strain Response, State – Trait Anxiety Inventory and the Cope Score.
- Once the factors associated with stress related to the students are identified through the instruments used (refer to Appendix H) they will be analysed and recommendations as well as coping strategies will be discussed so that teachers are able to pin point problems and refer the student for therapy if need be.

Rationale

From the time that a child is born and throughout the formative developmental years the child is constantly faced with problems in various facets of life. These problems and difficulties are amplified if there are barriers that make overcoming problems a mammoth task, such as stress. To date there has been much research on stress experienced by adults however there is limited information regarding stress experienced by adolescents. This type of a study would thus bring about an awareness not only for students, teachers and principals but the society at large.

Furthermore the overall aim is to pin point the factors related to stress so that students can be provided with coping skills, which would hopefully be useful in decreasing the number of suicides amongst high school students in the Mmabatho area. If teachers as well as parents who are involved in the well being

of the student are able to provide support for the student, then it would assist in optimal adjustment and coping of the students. Minimal research has been conducted in this area in the North West Province and this study aims to provide people with at least some information to which they have previously not had access. In focusing solely on three schools, the study will lay the foundation for future research in this area, which could go on to include more schools.

Operational Definitions

- *Adolescents* – The period of development marked at the beginning by the onset of puberty and at the end by the attainment of physiological of psychological
- *Factor* – Generally anything that has some causal influence, some effect on a phenomenon.
- *Mood* – Any relatively short lived, low – intensity emotional state.
- *Social Support* – Generally and loosely, all those forms of support provided by other individuals and groups that help an individual cope with life.
- *Stress* – Generally any force that when applied to a system causes some significant modification of its form, usually with the connotation that the modification is a deformation or a distortion. The term is used with respect to physical, psychological and social forces and pressures.
- *Suicide* – A person who intentionally kills himself or herself (Reber, 1985).

CHAPTER 2

LITERATURE REVIEW

This chapter examines existing literature in order to highlight issues associated with stress amongst school pupils. There is focus on the concept of stress as part of our daily living and its relation to strain. In addition attention is also focused on similar studies previously conducted abroad and in South Africa and finally narrowed it down to the stressors that surrounds school adolescents.

Research into stress, both in adults and children, appears to be quite fragmented. It may be helpful to view it as being divided into five main areas.

The identifiable areas appear to be:

- (1) The events/conditions perceived as stressors
- (2) Models of stress
- (3) Stress in adolescents
- (4) Techniques, Social support and adjustment of adolescents
- (5) Environment and culture

The five areas may seem to be separately identified and researched as discrete entities but they are interrelated. In order to understand, explain and form a rationale for intervention when adolescents are stressed, it is necessary to have an insight into various components of stress. In order for this insight to be

achieved, it is important to have a theoretical comprehension of how the individual perceives stress and how coping patterns are affected by that perception. Coping patterns are reflections of perceptions of individuals and their place in the environment is also necessary. This recognition will in turn, indicate the suitability of any intervention made and will be suggested by the model of the stress process that is accepted. Choosing a model, which argued that stressors were inherently stressful, could approach intervention from a more “seek and destroy position”. These may target certain events, which were considered stressful and seek to find ways of minimising their impact or eliminating the stressor. If persuaded by a model, which suggested that having a certain personality type made us more or less susceptible to stress, it could seek to identify the ‘risk’ group and set up some behaviour modification programme. If this is accepted as an embedded depth model, it would be seeking interventions to encompass the event, the environment and the person, and would include a concern with problem solving and perceptual issues (Adams, 1980).

According to the *Microsoft Encarta 97 Encyclopedia* stress is being seen, in the medical field, as a physical, chemical or emotional development that causes hindrance and the outcome can be physical sickness.

Stress can also be defined, according to Appley & Trumbull (1986), as an adjustment relationship between an individual and the claim of a situation

(stressor). Stress can develop according to this source a dysfunction between environment stressors and the individual's resources.

Roos and Möller (1988), on the other hand state that stress in the context of behavioural science initially referred to the external factors or occurrences that affects the human and harms his general functioning. It was realized that not all people react the same way in the same circumstances, so that stress cannot just be equalled to external factors. Research has shown that the human's reaction on external pressure, occurrences or circumstances (stressors) depends greatly on how he handles or interprets the overall situation (Roos & Moller, 1988). A different implication of the effect of the interpretation of stress is also supported by (Depue, 1979).

Among the definitions, stress is best defined as the physiological, psychological and behavioural response of an individual seeking to adept an adjust to both internal and external pressures. This definition is good because it clearly designations between the stress itself, which is essentially our response, and the factors of stress, which are the agents that bring about the response. It also serves to indicate the far-reaching nature of stress, and des not concentrate only on the negative aspects. In this respect, it is important to release that not all aspects of stress are undesirable (Capel & Gurnsey, 1987).

Stress, like relativity, is a scientific concept, which has suffered from the mixed blessing of being too well known but much less understood. People are

exposed to stress every moment of their lives, and their response to it often determines the quality of our life and health. Perhaps the first step is to learn exactly what stress is, because the more we know about its causes and effects, the better we are able to manage it. Stress is the non-specific response of the body to any demand such as heat, cold, joy, sorrow, muscular exertion, drugs, and hormones, which elicit highly specific responses. Stress is not something to be avoided since every moment of our lives some demand for life-maintaining energy exists. Even while we are asleep, the heart, the respiratory apparatus, and all other organs continue to function.

There are two traditions of stress research that deserve brief comment, namely, the physiologic and the psychological. Selye (1976) is the founding father and guardian angel of the physiological tradition. For scientific purposes, Selye (1976) explains that stress is defined as the non-specific response of the body to any demand. Somewhat less scientifically, Selye (1976) believes that the study of stress touches closely upon the essence of life and disease and that it can give us a new philosophy to guide our actions in conformity with natural laws. The study of stress as envisioned by Selye (1976) places emphasis on non-specific hormonal responses, especially those of the pituitary and adrenal glands.

Within the psychological tradition of stress research, by contrast, the most emphasis has been placed on how a person (or infrahuman animal) comes to judge a situation as threatening, and hence stressful. Considerably less

attention has been devoted to the nature of the stress response. Indeed, within this tradition, “ stress” has been used as a generic term to cover almost any response to a situation that taxes the individual’s adaptive resources. This covers such specific states as fear, anger, etc., as well as such diffuse affective experiences as anxiety and depression (Selye, 1997).

In a sense, then, the physiological and psychological traditions complement one another – the former concentrating on response and mechanisms and the latter concentrating on eliciting conditions.

Selye (1997) identified three stages in the reaction of stress, that was also supported by Adams (1989).

- (i) **Alarm:** The body recognizes the stress and prepares for the fight or flight reaction. Endocrine glands release hormones that increase the heartbeat, breathing and blood sugar level. Perspiring increases, the pupils dilate and digestion is affected.
- (ii) **Resistance:** The body repairs any harm that was caused by the alarm reaction. If the stress continues, the body will be on guard and won’t be able to repair any harm that was caused.

- (iii) **Exhaustion:** If resistance continues, exhaustion and even stress related interferences would take place. Continued exposure to stress, empties the body's energy source and can even lead to death.

According to Kaplan, Sadock & Grebb (1994), it depends on the nature of the situation, the person's resources, psychological defence ability and coping mechanisms if a situation is experienced as stressful or not. It implicates, the ego, a process whereby a person reacts to external and internal influences, processing information and then reacting accordingly depending upon the individuals personality.

From the above, it can be seen that a physical and emotional interaction occurs when handling stress. The body recognises stress and tries to fight the stressor and if this is not possible, the person becomes physically and emotionally drained and exhausted. Not all people react the same way to stress, or don't see the same type of situation as stressful. The internal experiencing and interpretation of a stressor plays a greater role than the external stressor and different people handle stress in different ways.

Clinical psychologist and mental theorists have given considerable attention to conceptualising which situation is likely to be stressful. Caplan (1970) defines crises as a person struggle with a current life stress. This may be related to a situation that challenges him beyond his current capacity as is so often for children in school.

Theorists who have addressed questions on stress include, (Mandler & Watson, 1966) who suggests that it is the interruption of a person's plan of behaviour that is stressful. An individual makes plans whose function is laying out a course or sequence of behaviour. Unanticipated interruptions of such a sequence of behaviour produces a state of arousal (i.e., an undifferentiated stress response) followed by an emotional reaction such as anxiety.

Freud, (1949) postulates four major sources of tension (or stress), including frustrations, conflict, threat, and physiologic growth processes; while other theorists view conflict as the major source of anxiety. In contrast, Rogers (Hall & Lindzey, 1957) suggests that any experience that is inconsistent with the organisation or structure of self may be stressful, and perceived as a threat.

Erikson, (1950) provides an excellent example of situations with high potential for stress with his eight development crises of man. Each of these stages specifies what psychologically important development must take place, and what will happen if it does not. For example, at school age the child must develop a sense of industry; if he does not, he will be unable to compete successfully in society and will tend to feel inferior.

However Klein and Lindemann, (1961) have developed three categories of potentially stressful situations that might be more helpful. First, there are those situations involving the loss of a significant relationship. Second, there are those

situations involving the introduction of one or more new individuals into one's social orbit. Thirdly, there are those situations involving transitions in social status and role relationships as a consequence of maturation, achievement or a new social role.

2.1 Life styles and stress

It is easy to slip into a vicious cycle kind of life style in our society in which firstly, there is a rush to embrace material goods, convenience, and "the good life", thereby reducing our abilities to cope with stress. Secondly, there is reward for competition and achievement above most other human endeavours, thereby increasing the amount of stress in our daily lives. There are tremendous pressures to follow both these paths and to ignore physical, mental and spiritual well-being.

Although it is difficult to change the materialistic and achievement bases of today's life styles, other conditions or situations exist that probably cannot be changed at all. These are people's personalities and certain other idiosyncratic characteristics, the relationships shared with our environments, and the nature of both work and school and the organisations of employment. If people are driven and deadline-orientated, for example, stress is more likely to lead us to heart disease (Friedman & Roseman, 1974). If we live in an environment in which interpersonal support and intimacy are rare or non-existent, we are more likely to

have chronically poor health. If we work with heavy workloads, unclear responsibilities, and tight deadlines, our health, job satisfaction and productivity are all more likely to suffer. (Adams, 1980)

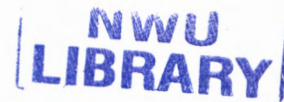
As we study the sources of stress, the necessity for making life style changes becomes obvious. The areas in which these changes are most often needed may be seen most easily from a holistic perspective – a “systems” approach to understanding stress. The holistic perspective on effective stress management views the individual as being involved with life on four key dimensions; physical, psychological, social and spiritual. None of us can be truly well without attention to all four of these dimensions; yet our society tends to emphasise just one or two, leaving the others out of the equation of life style management.

Professionals concerned with the physical dimension are trained primarily to recognise the physical symptoms of illness and to prescribe treatment to alleviate those symptoms. Whereas few physicians receive training in fostering *wellness*, an emphasis on wellness is as necessary for developing and maintaining good health, as is the alleviation of *illness*. Most professionals working with the psychological dimension are, like physicians, primarily concerned with the removal of negative symptoms, in other words, their emphasis is on *alleviating* depression rather than on fostering *happiness*. Lastly the spiritual dimension professionals are concerned with actively working to help people achieve a positive spiritual state, which involves a feeling of *integration* with, as opposed to

alienation from, the “wholeness” or “oneness” of the universe. Alienation implies feeling isolated or experiencing a deep sense of loneliness and hopelessness, whereas integration implies feeling involved and possessing a sense of belonging in the larger scheme of things. The spiritual dimension includes a variety of disciplines, philosophies and religions through the practise of which we can achieve integration (Adams, 1980).

2.2 Models of Stress

The traditional stress process model posits that not all individuals experience comparable levels of distress when exposed to similar levels of role strain (Allen & van de Vliert, 1984; Wheaton, 1983).



Individual's reactions to stress, whether they are adults or children, are complex. From observation, it may be seen that individuals react differently from one another when encountering stressors and may even react differently to the same stressor on different occasions. Thus the model must be able to accommodate a wide range of responses. It is clear that certain people appear more susceptible to stress than others. We observe that some events stress some individuals and not others and that some events seem to affect most, if not all, people associated with it. Thus, the model must also be able to account for a whole range of reactions (Robinson, Greene & Walker, 1988).

While adult models of stress and coping processes have been postulated, Lazarus & Folkman, (1984), there is a scarcity of models for adolescents. Shermis & Coleman, (1990) have offered a cognitive-behavioural model of adolescent stress and coping. This model comprises of five major components:

1. Environmental stressors,
2. Environmental moderators,
3. Personal factors,
4. Stress outcomes and
5. Behavioural outcomes.

Environmental stressors encompass “occupational hazards” which include daily problems (getting involved in an argument, experiencing bad weather, having plans changing unexpectedly) and major life events (e.g., parental divorce, death of a friend or relative, serious illness or injury), with different levels of stress experienced by individuals (Compas, 1987). Environmental moderators include support from family members, peers and school personnel who provide individuals with advice, teach skills and supply material aid. This helps the adolescent overcome emotional distress and cope with responsibilities (Compas, 1987). Shermis & Coleman (1990) suggest that it is the adolescent’s perception of support that actually determines the extent to which the effects of stress are moderated.

Personal factors - cognition being prominent, may also impact affective and behavioural outcomes. Shermis & Coleman (1990) have identified self-talk as one form of cognitive coping. An earlier conceptualisation included age, cognitive appraisal (e.g., perceptions of threat or loss, perceptions of control, self-esteem and problem solving skills) as personal moderating factors (Chandler, 1985). Stress outcomes may include physical and psychological symptoms. Chandler (1985) noted the outcomes of stress in the areas of school functioning and social relations. Behavioural outcomes, which are linked to stress outcomes, can be thought of as secondary responses to stress. Shermis & Coleman (1990) have listed drug abuse, delinquency, pregnancy and dropping out of school as maladaptive behavioural responses to stress.

2.2.1 Stimulus-response model

The stimulus-response model of the stress process is described as being based upon a view of human behaviour that is motivated by reactions to stimulations and these stressors are viewed either as stimuli or responses (Lazarus & Folkman, 1984).

As stimuli, stress is viewed as events impinging upon the person and includes conditions arising intrinsically, for example, drives such as hunger and sex. This approach relies upon the assumption that certain situations are inherently stressful. Lazarus & Folkman (1984: 89) define stress as:

“...a clearly identifiable external life event or chronic life situation (stressor) that causes a psychological disequilibrium in a child sufficient to result in a behavioural reaction (response)”

Implied in this definition is the notion that it is something about the nature of the stressor that engenders stress. The stressor is external to the child and the reaction is caused by each and every factor of the stressor.

This stimulus-response definition and model of stress also provides the rationale behind the ‘life events’ approach where major events are scaled on various measures. Coddington (1984) was the first to attempt a systematic measurement of stress in children in terms of the amount of readjustment required by an event. His scale was based upon the adult scale developed by (Holmes & Rahe, 1967); other measures used have been the desirability of the event, the anticipation of the event and the perceived control over it.

It appears that it is not just the stimuli or physical environment that determines the physiological response, but rather the individual's evaluation of these stimuli. The alternative approach within the stimulus-response model is to regard stress as a response. Selye's (1974) definition of stress, as the non-specific response of the body to any demand, treats stress as a disturbance of the body's homeostasis produced by environmental change. This definition assumes that a stressor is anything that causes a response and therefore has no limits. It may be that an increase in heart rate occurs in someone taking exercise when

psychologically they are at peace. In terms of the response model, exercise would become a stressor, as would any stimuli. Implicit in this model is the notion that the goal of an individual is always to maintain homeostasis. Rather than trying to reduce sensations individuals seek to increase their arousal by seeking it (Zuckerman, 1979).

The appeal of the stimulus response model, which views the stressor as a stimulus, is that it can simplify the measurement of stress. A level can be assigned to a stressor by a variety of means and a measure of individual stress can be made. Also, although perception of stress is individual, humans do share a history and most have been socialised into a system where values and beliefs are shared as will be discussed later. It would be expected then, that responses to stressors may also be affected by socialisation and that it would be valid to assign a 'score'. It can be useful to categorise and find trends in responses. From an administrative and a planning perspective this has obvious attractions and can result in stressors, perceived as such on a global level, being modified. It can also result in individual empowerment by virtue of belonging to, and identifying with, a group who have stressors in common. The danger of this approach is that by focusing upon the stressor, the range of individual response is lost. Each child's perception of the stressfulness of an event is unique, so by giving each event a 'score' there is a danger of losing that response; sight can be lost of the distinctness of individual perception (Seyle, 1976).

2.2.2 The Transactional model of stress

According to the Transactional Model of Stress, stress is defined as “ the outcome of interactions between the organisms and the environment” (Singer & Davidson, 1991: 37). This model dictates that something may be considered a stressor only to the degree that the individual appraises it to be so. According to this theory of stress, the way in which the people appraise a situation or demand is based on two factors: whether a demand threatens their well being {Primary Appraisal}, and whether the individual has the resources to meet the demand or stressor {Secondary Appraisal} (Sarafino, 1990).

Primary Appraisal could result in one of the following three judgements about a demand;

- Irrelevant – that it simply does not apply to the individual in question;
- Benign – positive;
- Stressful – applying to the individual and having some or other negative connotation (Sarafino, 1990).

The demands deemed as stressful are then appraised further based on whether they represent harm, loss or a threat. There are various factors which moderate the appraisal of a situation. Two of these factors mentioned by Taylor (1991) are ambiguity and control. Events, which are appraised as ambiguous, are situations about which the individual perceives a lack of clarity. The level of stress

experienced does however depend on the type of ambiguity perceived in a situation. Role ambiguity, occurs when a person is unclear as to what their role in a situation is believed to be, and can be appraised as highly stressful. Harm ambiguity refers to an uncertainty about whether or not enough resources can be mobilised to meet the demand faced. The appraisal of such a situation depends on the person's personality, belief and past experience (Sarafino, 1990).

Studies cited by Taylor (1991) have shown that stressors that are predictable have less of an impact than stressors that are unpredictable. Sarafino (1990) points out that this predictability can come about because of a signal that indicates that this stressor is going to occur. Thus this sense of control can be behavioural if one feels one can take some action in response to the demand faced or implemented by using a mental strategy to overcome the demand.

2.3 Stress in Adolescents

Early adolescence is a time in which change occurs within almost every domain of experience – physical, affective, social, cognitive, familial, and educational. Most adolescents handle these changes without developing problems. For some individuals, though, this period can represent a time of significant adjustment difficulties. For example, adjustment problems, such as low self-concept, feelings of depression, and decreased motivation for school, all show increases at this time and are thought to be related to the changes associated with early

adolescence (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flannigan & MacIver, 1993). However, the nature of the stress, the availability of supportive resources, and the characteristics of the adolescent all may play a role in whether the adolescent successfully adjusts to these developmental and educational changes (Petersen, Sullivan & Kennedy, 1991).

Researchers have highlighted many factors that contribute to the stressfulness of the transition from primary to secondary school. Among these are, increased academic demands and social comparisons, exposure to unfamiliar peers and teachers and practices that fail to meet early adolescents' developmental needs for autonomy and self-management (Fenzel, 1989; Pearlin, 1982).

A study conducted in the United States of America by Alva & Reyes (1999) examined the relationship between stressful life events, internalised symptoms of stress, and academic achievement among a sample of Hispanic students in a large urban high school. Direct effects of stressful life events and perceived competence on school grades and internalised symptoms were found.

There is a growing body of research supporting a connection between exposure to stressful life events and psychosocial maladjustment in children and adolescents (Cornpas, 1987). The general assumption of that research is that stressful life events cause, or at least increase, children's vulnerability to psychological, behavioural, or somatic disturbances. It has been found, for

example, that exposure to major life events such as the separation or divorce of parents, a change in school or residence, and parental unemployment are likely to be associated with emotional difficulties and academic maladjustment in children and adolescents (Dubrow & Tisak, 1989).

2.4 Problems of youth in transition

During adolescence, a person's body changes from that of a growing child to that of an adult. Every known human society recognises this change in physical status by according new standing to the person vis-à-vis his fellow humans. In fact, the dictionary definition of the word *adolescence* refers to the social change. It is a transition period between puberty (boyhood or girlhood) and adult stages of development. In the different societies known to man, the timing of the transition varies, as does its duration and the kind of recognition accorded to the changed status of the individual. Ultimately, it is the youth emerging from adolescence that, ultimately, define the future of their people (Sherif & Sherif, 1965).

In any known human society, adolescence is the period of change from the physical and social status of "child" to that of "adult". As noted earlier, in different human cultures this transition is strikingly different, both in duration and in the manner in which it is achieved. The period signifies changes in the individual's position relative to others, a shift in his loyalties and responsibilities.

It signifies new activities, different behaviour patterns, different attitudes, even changes in the way he looks, stands and walks. None of these changes can be accomplished unless the individual redefines his relationship to his world.

Otherwise, despite a manly or womanly figure and voice, he would behave as he did in childhood or respond to immediate aspects of each situation, necessarily hindering any consistency in relationships with others (Sherif & Sherif, 1965).

In short, the adolescent period presents the individual with the problem of reformulating his concepts of himself as being different in many significant respects from the now familiar childhood image. This is the fundamental difficulty in the psychology of the adolescent, and it represents a general difficulty for theories of human behaviour.

Whether in adolescence, childhood or old age, the problem of self or ego involves specification of the concrete social situations which the individual encounters, as well as the more general cultural setting in which he functions. The problem may be thought of fruitfully as the process of forming (and changing) conceptions about one's self relative to the many persons, objects, groups, institutions and values that constitute one's environment. Better still, these self-conceptions may be called attitudes, since they not only define denotative ties with aspects of the environment, but also imply their evaluation. By self or ego, we mean the constellation of such attitudes, which become intimately related to one another within the person and which, accordingly, define

his personal experiences of psychological stability or instability, as the case may be.

The shift from the status of childhood to adulthood implies, in varying degrees, a different relationship with adult figures that hitherto had been in charge of one's fate. In modern societies, the change has been referred to aptly as "psychological weaning" from parents. Whenever there is a social change underway, the young person may find that the adult generation provides few clear-cut solutions, which are acceptable to him as to how the change is to be accomplished. Inevitably, he is more impatient to prove and test himself as an adult or near-adult than adults are for him to make this "test" (Spencer & Dombusch, 1990).

To the extent that the adolescent period is a prolonged period between childhood and adulthood with unclear or unsatisfactory procedures for progressing to adult status and responsibilities, it produces a dilemma for the individual. The dilemma is a personal one, accompanied by strong emotions and motivational urges. Such dilemmas are not entirely unique to adolescents.

Thus, the adolescent gravitates towards his peers more intensely, more often and more significantly than in childhood. These are the people who can understand him, since they are in the same boat themselves. They become his reference set for sizing up his own problems, his own strivings, and his own

ambitions. In this country, young people are encouraged in this process by the general accentuation of social activities in national life, by adults, by schools, and by mass communication, which deliberately feeds on appeals to adolescents. Much has been said about the relationship of an adolescent with his parents and of the importance of these relationships upon the attitudes and goals he achieves. Any valid consideration of childhood or of adolescence must sooner or later deal with the problem of these relationships – usually in terms of the effect of parental activities and attitudes on a child's behaviour and character formation, as well as the economic and social benefits, which parents provide or fail to provide for the child. During the first decade of life the home is certainly the centre of the child's existence. It is the place in which he spends the vast majority of both his waking and his sleeping hours, and it is the place in which he initially learns about other people and how to cope with them as the process of socialisation and of self-conceptualisation begins in the days immediately following his birth (Sherif & Sherif, 1965).

The family transmits and interprets their culture to the child, at the same time evaluating it for him. It is here that the child forms his first sense of values, both personal and social; it is here that he encounters security and insecurity, punishments and rewards, and it is here that he experiences acceptance or rejection. In his family he observes human contact and gains direct knowledge of the methods of control – whether democratic or autocratic or their variations – that we use on each other. When he first encounters the outside world it is from

the vantage point of his family circle and in a real sense he views the outside world through his family's eyes (Modell & Goodman, 1990)

2.5 Culturally specific stressors

Among the most commonly investigated demographic characteristics of at-risk children are low socio-economic status, low maternal education, large family size, minority group status, parental unemployment and change in work status (Flanagan & Eccles, 1993)

Research on the academic achievements of Hispanic adolescents has highlighted primarily the contributions of stressful life events and other demographic conditions on academic underachievement and failure. To better understand the processes enhancing academic success, research provides evidence that perceived self-competence and social problem-solving skills play an important role in predicting academic achievement. The present study focuses on stressful factors experienced by adolescents attending high schools, which are located in an urban, peri-urban and rural setting respectively.

Increasingly, professionals and parents are encountering adolescents who are displaying symptoms of stress. The NSPCC (1989) reported that the most frequently recorded stress factor in families in their study was marital problems (30%) and although not all children exhibit stress reactions as a result of family

discord, increasing numbers of children face transitions from a nuclear family. Also, with the additional emphasis on testing in schools, and a notion of standard achievement at specific levels, professionals and parents may expect to encounter stress reactions in children who were not previously thought to be 'at risk'. Professionals need to be able to understand the stress process and they need to have a rationale for recognition of stress. Through this understanding they may be able to recognise potential factors of stress and to attempt to address and modify them and to equip children to deal with stress effectively and positively.

Families, neighbourhoods, economic conditions, and history are all factors that influence a gracious or awkward transition into adulthood. Because adolescence is closely tied to the structure of and condition of adult society (Modell and Goodman, 1990), many of the factors that put students at risk, in reality, reflect larger societal problems. Family conditions, socio-economic status, and ethnicity are all-important factors in adolescent development (Feldman & Elliott, 1990). Minority youth, in particular, have difficulty in school for two reasons; firstly, this group is well aware of the values of the majority culture, its standards of performance and achievement (Spencer & Dombusch, 1990). "Minorities whose cultural frames of reference are oppositional to the cultural frame of reference of American mainstream culture have greater difficulty crossing cultural boundaries at school to learn" (Ogbu, 1992: 5). Secondly,

conflict between the majority cultures and their own often creates tension for minority students working on the developmental task of identity.

Some of the most obvious developmental tasks are learning how to handle a more mature body, forming a sexual identity, continuing to progress with such abilities as reading and writing, and beginning to explore career options. Of course, developmental tasks begin in early childhood and continue through adulthood. Unique to early adolescence, however, is the new cognitive abilities of dealing with problems in more abstract ways and these have considerable multiple perspectives. Students are moving from the "concrete" stage (able to think logically about real experiences) to the "formal" stage (able to consider "what ifs," think reflectively, and reason abstractly). This intellectual change is gradual and may occur at different times for different students. They may even shift back and forth from the concrete to the abstract, although it is important to remember that not all young adolescents, not even all adults, achieve this capacity (Kurdek, 1987).



Cognitive growth and development regulate the success of the four other major developmental tasks that is: (1) forming a personal identity or self-concept, (2) acquiring social skills and responsibility, (3) gaining personal autonomy, and (4) developing character and a set of values (Kurdek, 1987).

2.6 Personal Identity and Self-Concept

Until children move beyond concrete levels of thinking, the development of a personal identity is not really possible, enabling them to be self-conscious and introspective. The development of positive self-esteem takes reflection, introspection, comparisons with others, and sensitivity to the opinions of other people. With the beginning of formal thinking these processes become possible (Kurdek, 1987).

Self-esteem declines at age eleven and reaches a low point between twelve and thirteen. Students, especially girls, making the shift to large, impersonal junior high schools at grade seven seem to experience long-term negative effects on their self-esteem (Simmons & Blyth, 1987), particularly because of the interruption of peer groups. "Schools that emphasise competition, social comparison and ability self-assessment" can cause student's academic motivation and self-esteem to deteriorate (Wigfield & Eccles, 1995).

Minority youth have an especially difficult time forming an identity because the values of their culture may clash with the values and standards of the dominant culture. Minority youth, however, who have successful role models and who can learn to negotiate a balance between the two value systems will develop a positive self-esteem (Spencer & Dornbusch, 1990).

2.7 The socialisation function of the school

Socialisation is an important developmental task as man is a social being. The social education of the child must receive as much attention as the intellectual moulding. The school should not forget its function of moulding the child socially. Through this social education, the child can develop into a useful member of society. Sarvin-Williams & Berndt, (1990: 288) concluded “students who have satisfying and harmonious friendships typically report positive self-esteem, a good understanding of other people’s feelings and relatively little loneliness”. Additionally, those students with harmonious friendships tend to behave appropriately in school, are motivated to do well, and often achieve high grades.

By means of socialisation the dominant values and norms of society and its culture are transmitted to the child. The school in its role of socialisation is seen as the instrument that can bring about social improvement among the lower socio-economic groups. The school should be an institution that motivates the child. Research has shown that a positive correlation exists between the educational and vocational aspirations of the child and the socio-economic status of the family. It is assumed that children from low socio-economic residential areas leave school earlier, despite the fact that they may be very intelligent. It is significant to note that this is not necessarily the case. There are children who come from poor residential areas who attain high positions in society. The

teacher, especially the guidance teacher, should motivate the child to study further (Beeman, 1978).

A myth about the negative influence of peer groups has developed over the years. Recent research shows that young adolescents do not routinely acquiesce to peer pressure. In fact, they are more likely to follow the advice of adults rather than peers in matters affecting their long-term future and they actually rely on their own judgement more often than that of either peers or parents (Brown 1990).

Peer groups usually reinforce rather than contradict the values of parents. It is not surprising that young adolescents tend to form friendships similar to the relationships they have with their families. Brown (1990: 180) further concluded that students "seek out the peer group best suited to meeting their needs for emotional support and exploration or reaffirmation of their values and aspirations".

A developmental task that sometimes leads to emotional trauma is a young adolescent's needs to establish autonomy. The onset of adolescence is a time for major realignments in relationships with adults both at home and at school. Steinberg (1990) took a socio-biological perspective of "inter-generational conflict" (family fighting). Disagreement becomes a vehicle to inform parents about changing self-conceptions and expectations and an opportunity to shed the

view that parents can do no wrong. This type of low-level conflict begins with an already strong emotional bond between parents and children. If relationships are not strong before puberty (and often step-children and step-parents have a particularly rough time), this fighting can become destructive.

There is always a tendency to treat young adolescents like children one minute, adults the next. This causes them to become frustrated, which occasionally leads to their lashing out at adults due to their powers of reasoning. Although much young adolescent behaviour appears rejecting, this is not the time for adults to alienate themselves from their children. Early separation from adults may result in an increased risk of susceptibility to negative peer influences and participation in unhealthy, and dangerous behaviour, at the extreme even resulting in attempting suicide (Beeman, 1978)

Stress is a daily problem for one-third of U.S. teens, University of Michigan researchers report. In a survey of 8,000 high school students and people in their early 20's, they also found that nearly two-thirds of respondents feel stressed out at least once a week. In contrast, teenagers in Japan have lower levels of stress, the investigators report. Japanese teens usually concentrate on academic achievement over everything else. U.S. teens feel pressure to succeed in many different areas, including academics, sports, social life, and eventually in a career (Current Health 2, Feb 2000). With regard to South African teens it was found that when an informal survey of concerns of a group of grade sevens was

conducted it was found that most of them were concerned about not passing exams and many feared they would not find jobs when they left school (refer to Appendix F, Fair Lady, 29 March, 2000).

2.8 What causes stress in adolescents?

Stress can interfere with students' attitudes towards learning in school, and it can impact on behaviour and emotional well being. Severe or prolonged stress can contribute to health problems. Both good and bad events can be experienced as stressful, depending on how effectively they undermine a child's sense of security and well being. Peter Sheras, a clinical psychologist at the University of Virginia, researched middle and high school students on what caused them to stress out? Many identified academic pressure, fear of failure, dating relationships, friendships and peer group pressure.

Some American students reported job-related stress for example, having a boss who demands late hours on school nights. Student athletes targeted pressure to win. Some students also revealed more unique factors causing stress, such as having to contend with a physical disability, parents' divorcing, or financial pressure at home. Students also can experience the distress of "victimisation" at school - teasing, intimidation, bullying, and sexual harassment from other students and teachers. Domestic violence and other forms of abuse and neglect

at home can also contribute to the stressful lives of some children (Beeman, 1978).

The occurrence of minor physical symptoms of *stress*, but not the major psychometric disorders, was found to be associated with depression in high school students. Physical symptoms were not associated with suicidal preoccupation once the level of depression was taken into account.

There are many theories as to the etiology of psychosomatic disorders. The somatic weakness theory proposes that each person's body has genetically determined weak systems, which break down when the person is under *stress*. The specific attitudes theory proposes that particular childhood experiences arouse specific psychological conflicts and that the symptoms reflect these conflicts. For example, hypertension may be related to the person's attitude that he or she must continually be on guard and prepared to deal with threats of danger (Grace & Gramham, 1952). Often personality traits are associated with psychosomatic disorders. For example, hypertensive patients have been described as hostile but unable to express anger in a constructive way (Zax & Cowen, 1972).

2.9 Warning signs and symptoms related to stress in adolescents

It is important for teachers to understand the warning signals that the student's body and mind send out in response to a physical or emotional stress. By teachers acquainting themselves with these stress symptoms, they will be in a position to refer the student to the clinician for further evaluation and assistance. Below are the warning signs teachers need to be wary of:

Physical stress symptoms

- Tension (in the throat, chest, stomach, shoulders, neck, jaws)
- Headache and migraine
- Backache
- Irregular breathing
- Palpitations
- Dry mouth
- High pitched voiced
- Sweating
- Stomach ache and 'butterflies' in stomach
- Increased need to urinate
- Diarrhoea
- Sleeping problems
- Increased sensitivity to noise

Mental stress symptoms

- Lack of concentration
- Forgetfulness
- Inability to remember recent events
- Inability to take in new information
- Lack of co-ordination
- Indecisiveness
- Irrational or rash decision-making
- Being disorganised
- Making mistakes more frequently
- Misjudging people and situations
- Inaccuracy
- Struggling with simple tasks

Emotional stress symptoms

- Anxiety
- Phobias
- Panic and panic attacks
- Feeling persecuted
- Aggression
- Guilt
- Depression
- Mood swings

- Tearfulness
- Nightmares
- Feeling abandoned
- Excessive worrying
- Withdrawal
- Loss of sense of humour

The clinician through interviews using special techniques and conducting psychological tests will be able to assess the causes of the stress experienced by the student. The psychologist can provide individual therapy to prevent and to resolve crisis and other personal concerns in a student's private life, to improve the student's interpersonal communication and to help him/her to adapt to the schooling environment to reduce and eliminate their stress.

One of the techniques used by clinicians to manage stress is *relaxation* i.e. (systematic desensitisation) where the student is taught to relax while imagining encounters with feared objects or situations. Another technique is *biofeedback* in which the student learns to exert control over a specific physiological function by responding to feedback from that function. *Stress Inoculation Training* is an approach to stress management designed to help students build their coping skills and enhance their resistance to stress (Bishop, 1994).

2.10 Coping with stress

Stress has invaded the lives of even the youngest students, rendering the notion of a carefree childhood virtually obsolete. Educators and professionals can help adolescents before they reach breaking point. Children need certain abilities to deal with stress. These include problem-solving skills, the competency to regulate how they experience their emotions, and a capacity for self-control. Children also need a positive but realistic view of themselves and they need environmental supports - a safe school and home surroundings, and supportive relationships with peers, family, and educators (Walker & Greene, 1987).

- To equip children with these coping skills they need support from adults to cope adequately with their stress. Adults who are experiencing their own stress can, in turn, escalate the situation for children.
- An effective stress management policy for a school would strengthen children's individual skills for coping with stress. It would provide environmental supports for stress management - acknowledging that stress is a typical part of life, for example, which can help students feel less isolated.
- In a healthy family life, stress management should be part of daily living. School psychologists can assist in the selection of effective curricular

materials that teach the skills children need to cope effectively with stress.

Schools can support the creation of peer stress reduction groups and have a member of the guidance staff facilitate them. Using peer educators gives students the chance to discuss what the causative factors are, and enable them to begin to actively manage their stresses.

- Educators can encourage the students to write about their stress. Studies have shown that writing about emotional material can reduce stress and physical illness.

Above all, schools must provide a place where stressed students can go for guidance from school psychologists and other staff. Staff should call on school psychologists for consultations and service information workshops (Wyngaard, 1994).

2.11 Social support and adjustment of adolescents

One area that has received limited but increasing attention in relation to stress is the educational setting of the high school. High school for the early adolescent entails major changes both in the academic and social domains. Academically, the structure of the student's learning environment becomes more complex than in primary school, and expectations for academic achievement increase (Eccles et al, 1993). Socially, students must deal with a larger and more fluctuating peer

network at a time when, developmentally, relationships with peers intensify and take on greater significance in defining the self (Elias, Gora, Ubriaco, Rothbaum, Clabby, & Schuyler, 1986). Students also often deal with qualitatively more negative student-teacher relationships that can be marked by greater distrust and an emphasis on teacher control and discipline at a time when adolescents seek greater autonomy and personal choice (Eccles et al, 1993). Few studies have looked at differing areas of stress throughout the high school period (beyond the initial transition year) and how those stressors may be related, differentially, to adjustment outcomes.

Identifying the types of stress that students experience is important because certain types of events may affect adjustment more than others, depending on what the event represents in the adolescent's life. Theoretically, this would depend on the adolescent's developmental level and investment in related tasks, that is, which goals or domains of experience are threatened by the events (Compas, Doris, Forsythe & Wagner, 1989). For instance, the events shown to be most problematic in the middle school setting as outlined previously (i.e., events concerning academics, peer relationships, and conflicts with teachers and rules), all relate to the prominent issues of early adolescence (developing a sense of competency/identity exploration, increasing orientation toward peers, and developing autonomy). These factors causing stress should play a greater role in adjustment than would other factors that are developmentally less significant or threatening, for example, brief separations from parents. Further,

differing types of stress may have differing effects on adjustment; for instance, stress in relation to peers may affect adjustment in certain areas (e.g., self-concept), whereas conflicts with teachers and rules may affect adjustment in other areas (e.g., motivation for school).

Unhealthy adaptation to stress can take many forms, and includes school maladjustment. Stressors at home and school may lead to reduced attention span and to diminished motivation to succeed academically. Some students develop socially maladaptive coping patterns, including verbal and physical aggression towards others, defiance of authority, acting up, and juvenile delinquency (Compas, 1987). Anxiety, depression, and suicidal ideation are other reactions to stress. Moreover, some youths experience psychophysiological symptoms in response to chronic or severe levels of stress (Walker & Greene, 1987).

During times of high stress, these resources, whether social or individual, may be insufficient. When coping resources, such as problem solving skills, are made inadequate, stressful situations may give rise to unhealthy outcomes (Walker & Greene, 1987).

Research has sought to explicate factors associated with adolescents stress related to coping. Models have been constructed to identify the key variables in the stress adjustment relationship as discussed earlier. However, such models

have rarely been examined using rigorous statistical analysis that allow for modification of the particular model to provide for a suitability based upon the findings. Moreover there continues to be little understanding as to how the results of such investigations can be applied to interventions in the area of adolescent health (Wyngaard, 1994). The intent of the present study is to specify stressors experienced among high school students and their related coping strategies, and utilise this information to provide guidelines to the schools to address student health issues.

2.12 Resources for Social Support



Identifying stress, although important, provides only part of the picture, however. Adolescents also use social support to help them deal with stress and adjust to their changing environment (Hirsch & Rupkin, 1987). For instance, greater social support has been linked to better adjustment during the transition to high school and fewer symptoms of depression, somatisation, and other outcomes in older adolescents. Therefore, to understand adolescents' adjustment in high school, attention must be given to the resources for social support that adolescents draw on to meet the demands of their environment (Elias et al, 1986).

When considering the social support of children and adolescents, both the source of support example, family, peers, other adults and the type of support

example, emotional support, problem-solving support, companionship, must be considered (Patterson & McCubbin, 1987). The family may be relied on for many types of support but can be a particularly strong source of emotional and problem-solving backup. Peers can be excellent sources of companionship but rarely are relied on for problem-solving support.

This attention both to source and type of support is needed to better understand the ways in which social support may influence adjustment either directly or through a stress-buffering role. For instance, just as certain types of stress may be more important than others and may influence certain adjustment outcomes, so too may certain sources and types of social support differentially influence adjustment. For example, social support from peers may play a role in increasing adolescents' self-concept but may not be helpful in lessening feelings of depression. In addition to affecting adjustment directly, social support also may have an impact on adjustment by lessening the effects of *stress*. The matching theory of social support postulates that certain types of social support will be important under certain types of stress conditions (Gore, Aseltine & Colten, 1993).

For instance, in a review of the literature on social support in adulthood, found that for stresses that threaten a person's sense of competence, emotional support from certain key individuals in the workplace was important, but for stresses that arise from the acquisition of new social roles, instrumental support

and emotional support from parents and partners at home were important. In another example, (Gore et al, 1993) found that in older adolescents, the effects of peer *stress* were buffered by social integration (companionship) from peers. However, to date, no studies have investigated the match between type of stress and source or type of support as these relate to differing adjustment outcomes during the early adolescent period.

Also explored in studies were the relations between differing types of school stress (including academic, peer, and teacher/rule-related pressure) and differing sources and types of support (including emotional, problem-solving, and companionship support from family, peers, and adults outside the home), as these relate to differing adjustment outcomes during the middle school years (adolescents' feelings about themselves in the academic and social domains, their feelings of depression, and their thoughts about school). This study examined in particular whether differing types of stress, differing sources and types of social support were related to adjustment in a predictable manner. Findings were based on developmental considerations and a general matching of the type of stress, the source and type of social support, and the type of adjustment. By simultaneously assessing the relations between multiple stressors, social supports, and adjustment outcomes, this study extends previous research in the area and provides an opportunity to explore the matching theory of social support (previously studied in late adolescence and adulthood) in early adolescence (Gore et al, 1993).

Several theorists and researchers (Fenzel, 1990; Walker & Greene, 1987; Wheaton, 1983) have suggested that psychological and environmental resources, also referred to as personal coping resources and social support, tend to moderate the impact of strains on well being. Support for this moderator effect has appeared in some cross-sectional research among adolescents with respect to perceptions of self-competence and peer social support (Walker & Greene, 1987).

According to Moos & Billings (1982), personal coping resources are best conceptualised as a set of relatively stable attitudinal and cognitive dispositions that promote effective adaptation, thereby reducing the potentially harmful effects of excess emotional strain. On the other hand, individual vulnerability, or the lack of such characteristics, has the potential to amplify the effects of strain (Petersen & Spiga, 1982)

Personal coping resources that have been indicated to reduce the detrimental effects of strain on children and adolescents include personal maturity, an internal locus of control, perceived competence, and self-efficacy beliefs. Perceived competence, in particular with regard to peer relations and schoolwork, was chosen as the coping resource variable for the present study.

Research indicates that receiving support from important sources in stressful times or during difficult transitions or knowing that assistance is available if

needed, provides protection from distress. Although the conceptualisation and operationalisation of social support differs considerably, there is general agreement on the importance of emotional, appraisal, informational, and instrumental functions of support in times of stress (House, 1981; Wheaton, 1983). When using social resources in times of strain, early adolescents can seek support from peers, parents and other significant adults in their lives.

2.13 Social support as a moderator

The use of social support as a moderating factor between stress and adaptation is one that has been well researched. Social support has been defined in many ways and the most common is that social support is what people who are socially connected share. House (1981) cited in (Murphy, 1988) defined social support as an interpersonal transaction involving one or more of the following: emotional concern; instrumental aid; information or advice and appraisal or knowledge relevant to self-evaluation.

Caplan (1974) cited in (Haggerty, 1980) defined social support as “attachment among individuals to improve competence in dealing with crises.” Whatever the definition, social support studies indicate that people with spouse, friends and family members who provide psychological and material resources are in better health and cope better with stress than those who have less or no backup support at all (Schilling et al, 1984).

Pelletier et al (1994) conceptualises source of support as spouse, family members, support groups and professionals. Schilling (1984) identified three levels of social support. Level one includes nuclear family members, close friends, relatives and other significant persons. These provide basic, enduring and immediate sources of social support. A second level includes neighbours, more distant friends, distant relatives, and certain professional and service providers. A third level of support is even less intimate and is defined by superficial or infrequent contact, often in the context of social institutions. Therefore, source of support can be crudely distinguished as being informal or formal.

Type of support refers to the content of the help. Wills (1985) outlines numerous types of support. These include esteem support, status support, informative support, instrumental support, motivational support and social companionship. Esteem emotional support is providing information that one is accepted. Informational support is help in defining, understanding and coping with problematic events. Instrumental support is the provision of financial aid, material resources and required services. Social companionship is spending time with others in leisure and recreational activities. Each type is defined by the needs of the person requiring the support. Satisfaction with support can be divided into satisfaction with the quality and quantity of support received (Wills, 1985).

As discussed earlier, the primary source of stress for adolescents appears to be chronic interpersonal and non-social problems. When faced with a seemingly overwhelming accumulation of micro-stressors (i.e., daily hassles), they may feel less capable of solving their problems, despite having the necessary skills. Instead, they often resort to avoidance, shift causal attributions to factors beyond their control, or adopt irrational beliefs. Therefore, interventions that focus on improving adolescents' orientation to problems, helping them to more effectively resolve daily stressors, are recommended for reducing stress.

The following support mechanisms mediate the impact of stress, the assessment of stressors, problem solving and social support, which offers valuable insight into adolescent's perceptions of their environment and ability to cope. Their problem orientation provides an indicator of coping efficacy, while appraisal of problem-solving skills suggests areas in need of improvement. Finally, family support reveals the availability of important coping resources.

The assessment of life events, problems, orientation, problem-solving skills and social support should prove especially helpful to mental health professionals working at the high school level. Students exhibiting symptoms of maladjustment can be offered group counselling based on their specific needs and situation. For example, those requiring social skills training or cognitive restructuring, those who are experiencing family conflict versus peer relationship

problems, and those who would benefit from general stress management techniques such as relaxation technique training.

Overall stress has been defined in terms of the reactions that people have in stressful situations, the response focussing on the physiological and psychological effects of particular events. According to the Transactional model the key factors in stress are appraisal and coping. In the primary appraisal, the person assess the challenge posed by a situation while in secondary appraisal an assessment is made of resources available for dealing with the challenge.

From the literature above it is notable that although there is limited research regarding stress and adolescents much has been raised concerning this issue in the recent years. Adolescence is a time of change for adolescents and their families. There are numerous biological, cognitive, psychological and social changes that take place during a relatively short period of time exposing adolescents to more life stressors than they experienced as children. These stressors are usually in the areas of school, family and peer relationships. During the potentially stressful period for adolescents the second major process involved is coping. Coping refers to the persons efforts, both cognitive and behavioural, to deal with a stressful situation. However the coping strategy selected by an individual will depend on the specific appraisal of the situation.

3 Hypotheses

Accordingly the following hypotheses were proposed:

1. The higher the coping scores, the higher the satisfaction with life.
2. The higher the coping scores the more positive the mood profile of the students.
3. Students with a high coping score tend to have a low strain response and a low score on the state anxiety inventory.

CHAPTER 3

METHODOLOGY

The results of this study are based on a single geographic area where three schools situated in an urban, peri-urban and rural setting were selected to assess the stress levels experienced by the students, thus representing a relatively restricted range of *school* conditions. The questionnaires that the students were asked to complete forms the bases of this research.

3.1 Research Design

The study undertook a survey design in which questionnaires were used to elicit responses pertinent to the objectives of the study. In a survey the researcher does not manipulate situation or condition, people simply answer questions provided. "Surveys give the researcher a picture of what many people think or report doing" (Neuman, 1994,p.28). Survey researchers sample many respondents who answer the same set of questions. Surveys measure many variables and test multiple hypotheses from questions about past behaviour and experiences. This research was structured to focus mainly on the stress experienced by students and also taking into account their financial status regarding parents' occupation, religious influences and leisure activities outside the learning environment.

3.2 Participants

A sample of 120 students were selected from three schools to form part of the research. Accordingly 40 students were selected from each school. The sample was stratified by school, grade and gender in which the students were 10 males and 10 females from both grade eleven and grade twelve classes of each school. Table 1 below represents the students in terms of gender and age in the three schools¹. A random sample² was selected from the class register provided by the principal of the schools. The sample was balanced for gender thus an equal number of both sexes was selected.

TABLE 1 – GENDER AND AGE RANGES

NEW
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THREE SCHOOLS COMBINED

age range * Sex of student Crosstabulation

		Sex of student				Total
		Male		Female		
		No	%	No	%	
age range	16-17	13	22%	21	35%	34
	17-18	22	37%	23	38%	45
	18-above	25	42%	16	27%	41
	Total	60	100%	60	100%	120

Further motivation for choosing this grade range was because it is in thesis ranges where society places pressure on these students to perform well. These students will be entering tertiary education and thus trying to achieve an

1 Annexure E - shows a complete breakdown of the three schools regarding their age range versus their sex.

2 The study was confined to the schools situated within the Central District Council of Mafikeng. This is stipulated in order to avoid methodological complications to the study arising out of the diversity of the samples.

exemption or at least a reasonable grade so that they can pursue their careers further. Financial constraints add to their stress whereby these students need to maintain high standards to enable them to qualify for bursaries and scholarships.

The tables below show the rest of the demographic figures of the 120 students:

Table 2.1 below indicates that 99.2% of the sample comprised of black students.

TABLE 2.1

race group

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid black	119	99.2	99.2	99.2
coloured	1	.8	.8	100.0
Total	120	100.0	100.0	
Total	120	100.0		

Table 2.2 indicates that 1.7% of students were of Jewish faith while 70% were of the Christian faith.

TABLE 2.2

religion

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not answered	1	.8	.8	.8
catholic	17	14.2	14.2	15.0
christianity	84	70.0	70.0	85.0
jewish	2	1.7	1.7	86.7
zionist	3	2.5	2.5	89.2
other	13	10.8	10.8	100.0
Total	120	100.0	100.0	
Total	120	100.0		

From the table computed below it is evident that majority of students enjoyed outdoor sports with soccer and netball being their favourite.

TABLE 2.3

sports

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not answered	3	2.5	2.5	2.5
soccer	53	44.2	44.2	46.7
cricket	6	5.0	5.0	51.7
netball	36	30.0	30.0	81.7
swimming	13	10.8	10.8	92.5
other	9	7.5	7.5	100.0
Total	120	100.0	100.0	
Total	120	100.0		

Table 2.4 below indicates the hobbies of the students, where reading comprises of 79.2%.

TABLE 2.4

hobbies

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not answered	4	3.3	3.3	3.3
reading	95	79.2	79.2	82.5
drawing	12	10.0	10.0	92.5
poetry writing	2	1.7	1.7	94.2
other	7	5.8	5.8	100.0
Total	120	100.0	100.0	
Total	120	100.0		

The table below indicates that in terms of the students music choice, rap (38.3%) and pop (30.8%) were the most popular.

TABLE 2.5

music

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not answered	11	9.2	9.2	9.2
rock	9	7.5	7.5	16.7
pop	37	30.8	30.8	47.5
rap	46	38.3	38.3	85.8
jazz	6	5.0	5.0	90.8
instrumental	11	9.2	9.2	100.0
Total	120	100.0	100.0	
Total	120	100.0		

3.3 Apparatus / Instruments

The primary source of data collection in this research was gathered by means of closed-ended questions in five questionnaires. The questionnaire was produced in the form of a booklet (refer to Appendix H), which consists of the participant's biographical information. This included the participants' gender, age, race group, grade, and religion. In terms of leisure there were three categories namely sport, hobbies, and music as well as their favourite radio station (refer to Appendix C). Lastly their parents' occupation was included in this section. The following information was pertinent in a sense that it allows the researcher an opportunity to assess the influence of parents' occupation on stress and coping ability.

The first instrument used was the "Satisfaction With Life Scale". It comprises of five statements with regards to one's life in which you may agree or disagree. This is done by using the 1-7 scale with 1 being strongly disagree and 7 being strongly agreeing.

The second instrument used was the "Cope" which measured how people respond when confronted with stressful events in their lives. This instrument comprises of 53 questions in which the respondent has four options. These options are referenced indicating the reaction of the respondent. Each statement from the options as listed below describes this:

- 1 – I usually don't do this at all
- 2 – I usually do this a little bit
- 3 – I usually do this a medium amount
- 4 – I usually do this a lot

Anxiety was measured using the State-Trait Anxiety Inventory (Spielberger, Gorsuch & Lushene, 1970). The State -Trait Anxiety Inventory (STAI) is comprised of a self-report questionnaire that consist of two scales each containing twenty items. The first scale evaluates state anxiety – S – Anxiety (that is respondents indicate how they feel at the present moment in time). The second scale measures trait anxiety – T- Anxiety, considered to be a relatively stable characteristic by having respondents indicate how they feel generally. The

STAI is used in the present study to measure the degree of stress experienced by students; the higher the score the higher the degree of stress.

The STAI was originally developed as a research instrument for investigating the phenomena in "normal" (non psychiatrically disturbed) adults. It has been found useful in measuring anxiety in junior and senior high school students. The STAI provides a useful and versatile instrument for the measurement of state anxiety, and its content, concurrent and construct validity compare favourably with other published tests of anxiety. The subjects included the normative sample of undergraduate college students. The test retest correlation for the A-TRAIT scale were reasonable high ranging from 0.73 to 0.86 while those for the A-STATE was relatively low, ranging from 0.16 to 0.55, with a median R of only 0.36 for the six sub groups. Evidence on the construct validity of the A-STATE scale is available for a sample of college students. Critical ratios for the differences between these means and point – bi-serial correlations are also reported. The mean score for the A-STATE scale was considerably higher in the examination condition than in the norm condition for both males and females (Spielberger, Gorsuch & Lushene, 1983).

The fourth sub-scale used was the Profile of Mood States (POMS), which has been developed to measure six identifiable mood or affective states: Tension - Anxiety; Depression-Dejection; Anger-Hostility; Vigour-Activity; Fatigue-Inertia; and Confusion-Bewilderment. It is recommended primarily as a measure of mood

states in psychiatric outpatients and as a method for assessing changes in such patients. However it is also recommended for similar purposes but only on research basis for normal subjects who have at least some high school education (McNair & Lorr, 1992). There is at present no available data on the Profile of Mood States with either normal or disturbed adolescents however it seems likely the Profile of Mood States could prove to be useful in research studies involving such subjects. The table below represents data on the homogeneity of the six replicated Profile of Mood States factor scores. The data are from the patient normative samples of studies done. The indices of the extent to which the individual items within the six mood scales measure the same factor are near .90 or above. These internal consistencies range from slightly to considerably higher than in the developmental forms of Profile of Mood States, the increase in reliability may be as a result of increasing the number of items in some factors and changing to the 5-point scale format (McNair & Lorr, 1964).

Table 3

Internal Consistency Reliabilities (K-R20) of the POMS

Factor	Items	Study 5a	Study 6b
Tension - anxiety (T)	9	0.92	0.9
Depression - Dejection (D)	15	0.95	0.95
Anger - Hostility (A)	12	0.92	0.93
Vigor (V)	8	0.89	0.87
Fatigue (F)	7	0.94	0.93
Confusion - Bewilderment (C)	7	0.87	0.84
aN = 350 male psychiatric outpatients			
bN = 650 female psychiatric outpatients			

The above table has been adapted from (McNair & Lorr, 1964).

The final instrument measures strain. Our natural, physical and psychological responses to excessive pressures are called strain. This instrument is presented in terms of 21 items, which indicates common strain responses. The respondent is instructed to review the events of the past few weeks and read the statements provided. After doing so there are five options presented to the respondent, these being:

0 – never

1 – rarely

2 – infrequently

3 – sometimes

4 – often

5 – always

The appropriate number is then chosen and reflected per statement. The reflected responses are totalled and measured on a scale.

3.4 Procedure

Informed consent was obtained from the various school principals and parent governing bodies by the researcher. Once the sample was selected, the 40 students from each of the three schools were placed in one classroom. The questionnaires were handed to these students by the researcher with the assistance of the guidance teacher.

Before the students began, they were informed about the purpose of the study. Students were further told that they were randomly selected from the class register and those twenty boys and twenty girls were needed for the study. Lastly students were assured that their responses would remain confidential and that in the event if stress was found to be affecting them, workshops would be run to help students cope with the stressors experienced. Permission was also sought from the students to participate in the study. After consent was given, questionnaires were then handed out.

Each student received a compilation of five questionnaires with the appropriate instructions on each of them. These are as follows:

- Self- Evaluation Questionnaire STAI FORM X-1 & X-2;
- POMS -Profile of Mood States;
- The Strain Response;
- Satisfaction with Life Scale and
- COPE

The presence of the researcher is necessary in case that students experience difficulty in understanding the instructions or a specific question, they can feel free to ask the researcher or the guidance teacher with whom they are familiar . Most of the students took approximately 45 minutes to an hour to complete the questionnaires.

3.5 Analysis of Data

The quantitative data for the research, which will be gathered through questionnaires, will be subjected to statistical analysis. This will be done through the utilisation of the Statistical Package for Social Sciences (SPSS version 7.5 & 9). Both descriptive and inferential statistics will be used. The inferential statistics will comprise of correlation matrices, regression models, chi-squares and specific inferential testing namely ANOVA (refer to Appendix D for summary of data captured).

CHAPTER 4

RESULTS

Overall the averages for the various scales were found to be as follows based on the sample group of 120 students: the Strain Response Total showed a moderate average of 46.86, the Cope Total indicated a moderate average of 145.51 as well, while the Profile of Moods Total showed a low average of 129.96, the State-Trait Anxiety Inventory Total indicated a moderate average of 102.82 and the Total for the Satisfaction With Life Scale showed a moderate average of 21.60.

In planning for the analysis to test the relationship among the five totals of the questionnaires a correlation matrix was computed. Correlation is significant at the 0.01 level as well as the 0.05 level (2-tailed). The Pearson correlation between Satisfaction with Life and the students coping skills is 0.018, and the Pearson correlation between Satisfaction with Life and State anxiety Inventory is 0.256. Negative correlation for satisfaction with life and the students' mood profile as well as for satisfaction with life and strain response were elicited, indicating a correlation of -0.195 and -0.207 respectively. However this may be due to a result of students experiencing high stress thus causing them to have a low satisfaction with life and negative mood profiles. Table 4 below represents these coefficients.

Table 4**Correlation matrix indicating the relationship among five totals****Correlations^a**

		total score - swls	COPETOT	SEQTOT	POMPSTOT	SRTOT
total score - swls	Pearson Correlation	1.000	.018	.256**	-.195*	-.207*
	Sig. (2-tailed)	.	.847	.005	.033	.023
COPETOT	Pearson Correlation	.018	1.000	.258**	.160	.114
	Sig. (2-tailed)	.847	.	.004	.080	.214
SEQTOT	Pearson Correlation	.256**	.258**	1.000	.276**	.156
	Sig. (2-tailed)	.005	.004	.	.002	.090
POMPSTOT	Pearson Correlation	-.195*	.160	.276**	1.000	.431*
	Sig. (2-tailed)	.033	.080	.002	.	.000
SRTOT	Pearson Correlation	-.207*	.114	.156	.431**	1.000
	Sig. (2-tailed)	.023	.214	.090	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

a. Listwise N=120

Students who have high coping skills of which (56%) have a high satisfaction with life, whereas 44% of students have a low satisfaction with life. 64% of students with low coping skills having a high satisfaction with life compared to 36% of students who have a low satisfaction with life. 10 catholic students have high coping skills, however only 8% of them have a high satisfaction with life whereas 16% of the students have a low satisfaction with life. With regard to students with other religion 20% have a high satisfaction with life and high coping skills with regard to stress. However there is an equal split with regard to their satisfaction with life among students with low coping skills.

Table 5 below shows that more students with a high coping score also had a high satisfaction with life as compared to those with a low coping score ($\chi^2 = 36.6$, $df = 26$, $p = 0.081$)

TABLE 5

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religion * Recoded Satisfaction With Life * Recoded Cope Score Crosstabulation

Recoded Cope Score		Recoded Satisfaction With Life				TOTAL
		High		Low		
High	religion	No.	%	No.	%	
	catholic	4	8%	6	16%	10
	christianity	32	65%	30	79%	62
	jewish	1	2%	0	0%	1
	zionist	2	4%	0	0%	2
	other	10	20%	2	5%	11
	Total	49	100%	38	100%	87

Low	catholic	5	24%	2	17%	7
	christianity	14	67%	8	67%	22
	jewish	0	0%	1	8%	1
	zionist	1	5%	0	0%	1
	other	1	5%	1	8%	2
	Total	21	100%	12	100%	33

From the table below it is clear that 73% of students have high coping skills when cross tabulated with their strain response and a profile of their moods, in comparison with 27% of students with low coping skills. The split of students amongst high coping skills with regard to their strain response and moods indicates that 14% of students have negative moods with a high strain response whilst 86% of students also have negative moods with low strain responses. These students fall in the category where their coping skills are high.

Table 6 below shows that coping is related to the mood profile of students

($\chi^2 = 40$, $df = 79$, $p = 0.01$)

TABLE 6

strain response * poms total * Recoded Cope Score Crosstabulation							
Recoded Cope Score			poms total				
			High		Low		TOTAL
			No.	%	No.	%	
High	strain response	high	11	38%	8	14%	19
		low	18	62%	50	86%	68
		Total	29	100%	58	100%	87
Low	strain response	high	5	42%	4	19%	9
		low	7	58%	17	81%	24
		Total	12	100%	21	100%	33

The table below shows that students with a high coping score had a low strain response (76%) and a low score on the state anxiety inventory (81%). A χ^2 test of significance confirmed this relationship ($\chi^2 = 48.4$, $df = 46$, $p = 0.376$)

The split of students amongst high coping skills with regard to their strain response and anxiety indicates that 32% of students have low anxiety with a high strain response whilst 38% of students who also have low anxiety have low strain responses. These students fall in the category where their coping skills are high.

TABLE 7

strain response * state anxiety inventory * Recoded Cope Score Crosstabulation

Recoded Cope Score			state anxiety inventory				
			High		Low		TOTAL
			No.	%	No.	%	
High	strain response	high	13	24%	6	19%	19
		low	42	76%	26	81%	68
		Total	55	100%	32	100%	87
Low	strain response	high	2	20%	7	30%	9
		low	8	80%	16	70%	24
		Total	10	100%	23	100%	33

For the five variables of this study a Principle Component Analysis with varimax rotation was subsequently run. Table 8 below elicits the amount of variance explained by each variable. Clearly, the first two variables namely satisfaction with life and cope indicates 61.12% of the variance in the model.

TABLE 8

Total Variance Explained			
Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
swls	1.730	34.598	34.598
cope	1.326	26.526	61.124
seq	0.849	16.990	78.114
poms	0.596	11.922	90.035
sr	0.498	9.965	100.000

Extraction Method: Principal Component Analysis.

A normal q-q plot of the total score on satisfaction with life was computed (Figure 1) as well as for the cope scores (Figure 2). Probability plots are generally used to determine whether the distribution of a variable matches the test distribution, the points will cluster around the straight line. From the q-q plots computed it was found that almost all the points are very close to the line of regression.

Normal Q-Q Plot of total score - swls

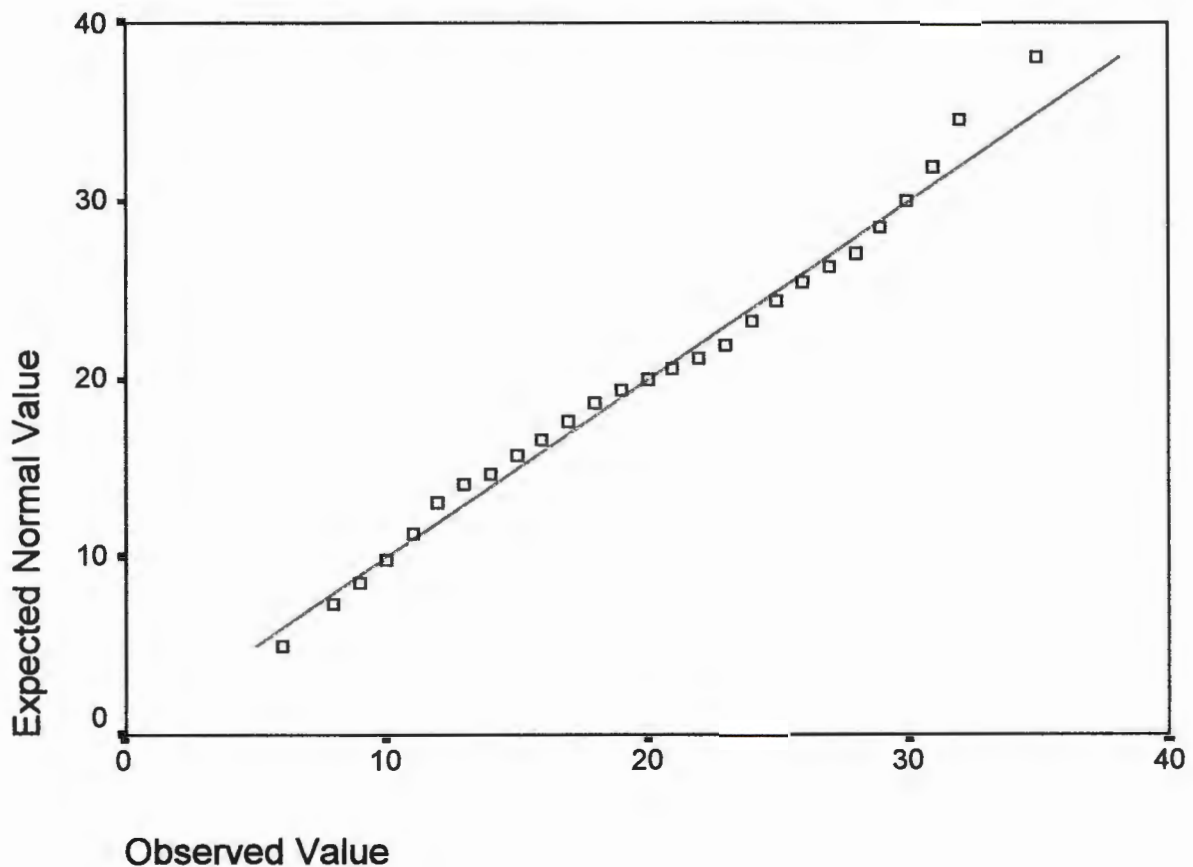


Figure 1 – Figure of normal q-q plots of the total score for satisfaction with life

The figure below indicates that there are fewer outliers as regards to coping as the dependent variable.

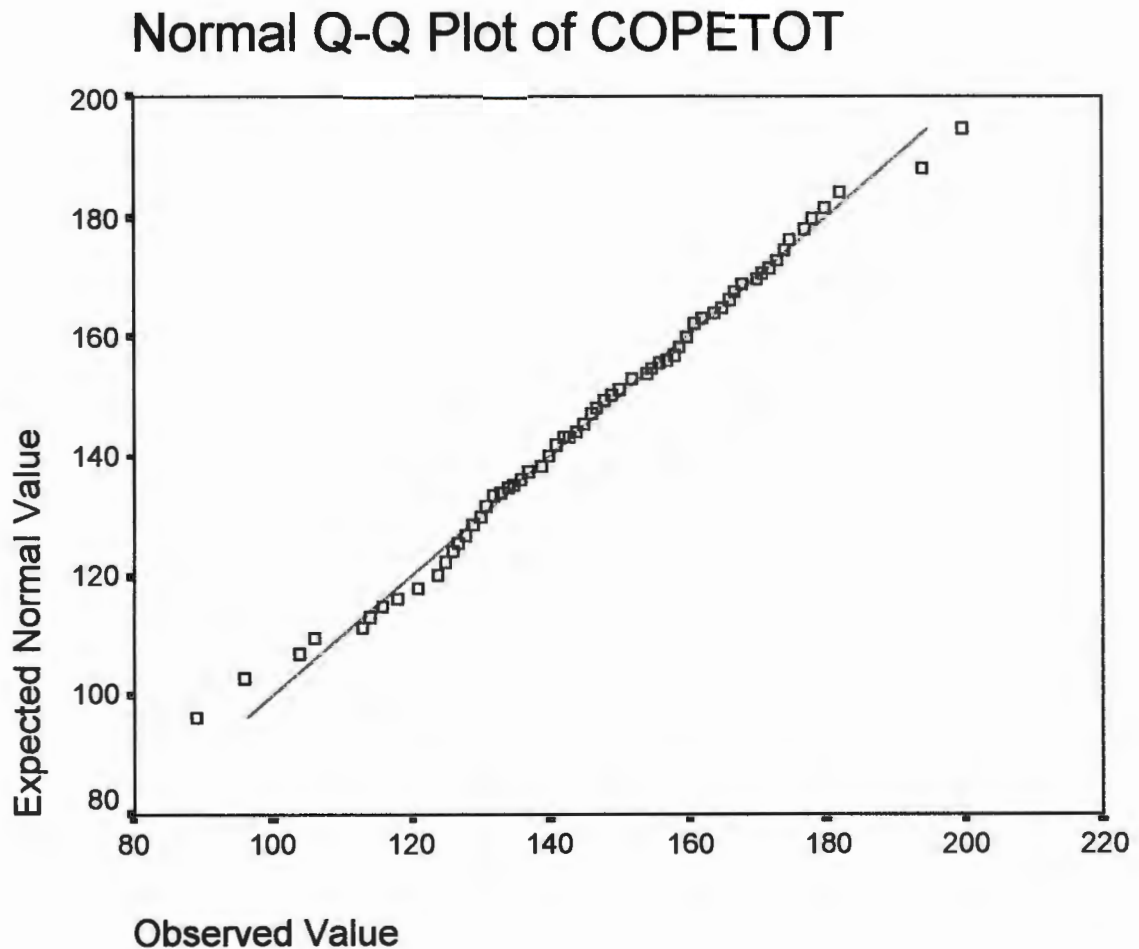


Figure 2 – Figure of normal q-q plots of the cope total

A multiple regression analysis using cope and satisfaction with life being dependent variables, and profile of mood states, state anxiety inventory and strain response being independent variables, was computed.

Table 9 below indicates the rotated component matrix with cope and the state anxiety inventory indicating a high significance of 84%.

TABLE 9

Rotated Component Matrix*		
	Component	
	swls	cope
total score - swls	-0.63	0.56
COPETOT	0.20	0.57
SEQTOT	0.11	0.84
POMSTOT	0.76	0.30
SRTOT	0.77	0.14

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

*Rotation converged in 3 iterations.

TABLE 10

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.278 ^a	.077	.045	18.79	1.625

a. Predictors: (Constant), total score - swls, POMPSTOT, SEQTOT, SRTOT

b. Dependent Variable: COPETOT

From Table 10 above, the independent variables accounted for 28% of the change in coping. However, the amount of variance explained increased when the dependent variable was re-introduced on satisfaction with life ($R = .41$) which means that the independent variable explain 41% of the change in satisfaction with life.

TABLE 11

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.406 ^a	.165	.136	6.00	1.763

a. Predictors: (Constant), COPETOT, SRTOT, SEQTOT, POMPST

b. Dependent Variable: total score - swls

The R square value is a measure in regression, which attests to the proportion of variance in the dependent variable, accounted for by the independent variable. It varies between 0% and 100% (0- 1) where 0% indicates no amount of explanation and 100% indicates, all of the variance is explained.

CHAPTER 5

DISCUSSION OF RESULTS

Once again it must be highlighted that the main focus of this research is to assess the level of stress experienced by high school students in grades eleven and twelve who are attending schools located in and around Mmabatho. Secondly this study aims to bring about awareness and support for these students to reduce their stress.

This study can be closely linked with a study done in Los Angeles where fifty four adolescents (16 boys and 38 girls) from a middle school completed two self report measures (the Adolescent Stress and coping Measure and the State-Trait Inventory) that examined their experience of stress and which also identified the factors causing stress (stressors), in the environment.

The findings revealed that the degree of stress as measured by the Adolescent Stress and coping Measure (ASCM) indicated that the sample as a whole experienced a slight degree of stress, as the mean of 2.04 corresponds to "not very often" on the four-point scale. This was consistent with this research as the findings shows that students who had high coping scores experienced low strain (76%) as well as a low score on the State -Trait Anxiety Inventory (de Anda, et.al, 1992)

From this study it is evident that most parents of these students are employed where their level of skill is between unskilled and semi skilled. Due to this, obtaining the income to sustain the family's basic needs is a constant struggle. This in turn places stress on these students as they are at the stage of leaving school and entering adulthood and the working world. This will be a time where they will need to decide whether to look for employment and assist their parents financially or to further their education.

These students also face another stress, which is due to the current situation in South Africa i.e. as the country goes through a political transition where education is one of the key focus areas, pressure to improve the system of training the students is constantly being targeted. This intervention from the political arena causes a lot of strain on the educators to produce positive results, which indirectly puts a lot of pressure on the students.

The present study fails to support the notion that the parent's employment status has an effect on the students stress levels. This failure was due to the nature in which the students completed the biographical section of the questionnaires. Students used words such as none, government employee, and some of the students left this space unanswered. Thus it was difficult to assess whether the parent was deceased or unemployed, making it impossible to analyse this information.

A study done by Flanagan & Eccles (1993) examined the effects of family stress (changes in parental work status) on adolescents' school functioning. It was found that adolescents' of these parents who were demoted or laid off while their child was making the transition into high school had a harder time adjusting to the new school, thus engaging in more disruptive behaviour affecting peer interaction.

Like the study above, the sample of students that was selected in this study experience some form of stress due to the employment status of their parents. Taking into account the demographics and location of the schools selected it is a fact that the unemployment rate in the North West Province is fairly high (refer to Appendix G). It is also significant to note that South Africa being in its 7th year of democratic ruling is still undergoing changes regarding education and employment generation.

Over the past decade, factors causing stress and psychological problems and psychosocial problems discussed appear to have affected younger and younger adolescents. This younger population is at risk given the limits of their levels of psychosocial and cognitive development and their life experiences. This study discusses the perceptions of a sample of students regarding their experience of stress, their identification of the stressors in their environments, and their use and evaluation of the success of various coping strategies for dealing with the stress experienced.

Studies of coping strategies have found that both adaptive and maladaptive coping strategies are used. Adaptive coping strategies consist of distraction and diversion (including watching television, listening to music and reading) and these have been found to be to be common coping strategies for dealing with stress (de Anda, et al, 1992).

Adolescents also seek interpersonal support from peers and parents.

Maladaptive coping strategies used by adolescents have included substance abuse and lack of self-control temper.

It was found that in the present study all the students indicated some form of leisure activity ranging from sports, hobbies and music. Almost 65% of the students engaged in physical activities e.g. soccer and netball and only 6% of the students did not emphasise that they have a favourite music station indicating that music is used as a means of coping with their daily stressors.

In a study done with 54 students (16 boys and 38 girls) the difference in mean scores on the STAI for boys and girls did not reach statistical significance.

Gender differences relative to the norm were noted. Separate norms are given for boys and girls on the STAI. Girls scored above the norms (42.58) on the T-Anxiety scale versus a norm of 40.97 and 42.28 on the S-Anxiety scale versus a norm of (40.34). This is in direct contrast where the boys scored 40.69 which is

very close to the norm of (40.17) on the T-Anxiety scale and 36.42 lower than the norm (39.45) on the S-Anxiety scale (Spielberger, et al., 1983).

The present study shows that the total State Trait Anxiety Inventory indicates that the total number of girls (60) scored 50.12 indicating that they scored above the norm. The total number of boys (60) scored 49.88, which is also above the norm thus indicating that both genders level of stress is higher than the norm.

A study done by Chandler (1985) indicates that data from a sample of ninth and tenth grade students provide some indication that coping resource variables are impacted by stressful events and consequently impact self-related adjustment. While scores suggest that students had adequate problem-solving skills, it appears that those with a negative orientation to problems found it difficult to cope with stressful situations.

In contrast to the above a cross tabulation was run on the present study between coping skills, strain response and mood profiles. It was found that 73% of the students had high coping skills of which only 33% of them had positive mood profiles. This correlation further revealed that 62% had low strain response with a positive mood profile. This difference in students' coping may be due to the difference in their grades thus showing that the more mature the student the higher their coping skills, probably due to life experiences.

To develop life styles that will help us to be truly well and stress free we need to consider our individual development along each of the three dimensions; physical, psychological, social and spiritual (Adams, 1980). Although it is not enough to only rely on one specific dimension for example the spiritual dimension where one would pray to solve their problems. A practice such as this however improves progress along the spiritual dimension.

It was evident in the present study that each student identified himself or herself to a religious affiliation, thus indicating that they probably use their religions as a way of helping them cope with stress. This is not to say that the sample of students only seeks spiritual guidance to help them cope with stress. There is enough evidence that these students do also engage themselves in physical and social activities.

CHAPTER 6

LIMITATIONS OF THE STUDY

The limitations of this study are as follows:

1. It should be noted that the sample drawn was from a single geographic area and thus represent a relatively restricted range of community and school conditions. Future research should include a larger more diverse sample. Additional research including adolescents from other race groups would help to eliminate the generalising of these findings.
2. Language was also seen as another limitation as English is not the first language of the majority of students in the sample.
3. Only a qualitative study was undertaken. A qualitative research would have been useful in explaining the cognitive aspects of stress and their coping strategies in this population.

CHAPTER 7

ETHICAL CONSIDERATIONS

A study of this nature was confronted with a number of ethical considerations. In order to ensure that the research was conducted correctly, consent letters were signed by the principals of each school (Appendix A). This letter detailed the objectives of the study and highlights the confidentiality of the participants as well as the information gathered. Participants were also informed that they had the freedom to withdraw from the process at any time without any penalties for doing so. Confidentiality of participants was mentioned and no identifying data was to be made use of at any point in the research.

CHAPTER 8

RECOMMENDATIONS

The role of psychologists and social workers should involve helping teachers recognise that teaching and reinforcing positive coping strategies should be a team effort involving teachers, counsellors and administrators. The guidance teacher together with the psychologist should be prepared to engage in staff development training to prepare the various members of the team to be able to provide students with coping skills instruction, role modelling and reinforcement in dealing with stress that the students may face. If it is found that the student's stress persist and their coping skills has not improved after consulting an educational psychologist referral needs to be made to a clinical psychologist. The clinical psychologist is well able to deal with stress, particularly when it arises from long standing problems. These could include those stemming from early childhood or the trouble teens.

Students may be particularly amenable to programmes that provide direction for positive coping strategies especially notably those that can demonstrate visible success in their application to a particular situation. Thus based on the finding of the study the following will need to be taken into account:

1. *We must commit ourselves to action.* Most people do not seriously mobilise themselves to deal with stress, unless their present lifestyles are threatened

in some way. The kind of shock usually required is the onset of hypertension or another chronic and presumably stress-related condition, or the premature death or serious illness of a family member or friend, again presumably from stress-related causes. However, to protect ourselves against stress, we must commit ourselves to its management.

2. *We must learn effective stress-management techniques.* Once we are mobilised, it is important that we have information about what works and about the possible consequences of not acting.
3. *We must recognise that stress and stress management is unique for each of us.* We are all different in what we experience as stressful, what the specific consequences of prolonged stress might be, and what constitutes effective stress management. Hereditary, personality, and past incidents, habits, illnesses and abuses are some of the factors that contribute to one's individuality. Although the basic stress response is non-specific, involving the autonomic nervous system and endocrine gland system both the immediate and the long-term effects on each individual is unique. Similarly, what works well for some people in buffering against stress (for example, physical exercise) may not work at all for others. Thus, it is important that a variety of stress-management techniques be available for people to choose from.
4. *We must be patient.* As the benefits of a changed life style often are not apparent immediately and usually are not exceptionally visible, a great deal of

patience is required. Once again, there are few direct cause-and-effect relationships in stress and stress management.

5. *We must accept stress management as a life long learning process.* Stress management is not to be practised periodically. In fact, it must be made an integral part of our daily life. As new stress related factors appear (for example, as we enter new age groups), new ways of coping must be developed such as in the case of adolescents.
6. *We must approach stress management one step at a time.* Those who attempt to make changes in their life styles but don't commit themselves usually are doomed to failure. The path to success is through the establishment of specific projects (for example, quitting smoking or becoming more assertive). Such projects are more likely to succeed if the group is kept to a manageable size whereby the individuals can integrate with one another and also provide support to each other (Adams, J 1980).
7. When the psychologist is orientated towards abnormality and personality development, and the school is oriented towards normality and school learning the value and impact of the psychological services is lessened. Thus it is important that the aims of psychological services be consistent with the goals of the schools.

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APPENDIX A

**Mmabatho High School
Leteane High School
Mococe High School**

The Principal

04 February 2000

Sir

PERMISSION TO CONDUCT RESEARCH: STRESSORS EXPERIENCED BY STUDENTS ATTENDING HIGH SCHOOL

I Deepa Daya am an intern psychologist at the Ipelegeng Child and Family Center in Makifeng. As part of my training, I am required to submit a thesis.

The research will be focused on high school students in grades 11 and 12. A total sample of one hundred and twenty students will be included. A sample of fourth students will be required from your school. The involvement of these students will be focused mainly on completing once off questionnaires.

I assure you that all information will be dealt with total confidentiality as well as a copy of this research will be submitted to the school on completion. If the research highlights high levels of stress, workshops can be conducted to help students to cope with these stressors with the assistance of the guidance teacher.

If you require any further information, please do not hesitate to call me on tel no. (018) 389 2426 (during office hours) or (018) 381 5385 (after hours).

Yours faithfully

Deepa Daya
Intern Psychologist
DD/let.0011

APPENDIX B

University of North West

Private Bag X 2046

Mafikeng

2474

Tel: (018) 389 2422 or 2426

Attention: Mrs D. Daya

PERMISSION TO CONDUCT RESEARCH: STRESSORS EXPERIENCED BY STUDENTS ATTENDING HIGH SCHOOL

Your letter dated 4 February 2000, referenced DD/rlet.0011 applies.

After careful consideration and discussions at the staff meeting, it was decided that permission be given to you to conduct the above research at Leteane High School. The following conditions will apply to this research:

1. All information be dealt within total confidentiality,
2. A copy of this research be submitted to the school on completion;
3. And if any major stress is found workshops be conducted so as to help the students cope with them.

We look forward to your next visit at our school where we will discuss the way forward and will assist you in any way possible.



APPENDIX B cont.

University of North West

Private Bag X 2046

Mafikeng

2474

Tel: (018) 389 2422 or 2426

Attention: Mrs D. Daya

**PERMISSION TO CONDUCT RESEARCH: STRESSORS EXPERIENCED BY
STUDENTS ATTENDING HIGH SCHOOL**



Your letter dated 4 February 2000, referenced DD/rlet.0011 applies.

After careful consideration and discussions at the staff meeting, it was decided that permission be given to you to conduct the above research at Mmabatho High School. The following conditions will apply to this research:

4. All information be dealt within total confidentiality,
5. A copy of this research be submitted to the school on completion;
6. And if any major stress is found workshops be conducted so as to help the students cope with them.

We look forward to your next visit at our school where we will discuss the way forward and will assist you in any way possible.

MMABATHO HIGH SCHOOL

PRIVATE BAG X9, MMABATHO 2735

Tel: (018) 392-1665 / 392-3320

Fax: (018) 384-1381

APPENDIX B cont.

University of North West

Private Bag X 2046

Mafikeng

2474

Tel: (018) 389 2422 or 2426

Attention: Mrs D. Daya

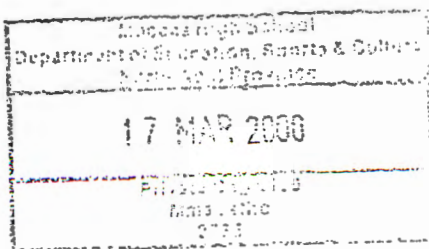
**PERMISSION TO CONDUCT RESEARCH: STRESSORS EXPERIENCED BY
STUDENTS ATTENDING HIGH SCHOOL**

Your letter dated 4 February 2000, referenced DD/rlet.0011 applies.

After careful consideration and discussions at the staff meeting, it was decided that permission be given to you to conduct the above research at Mococe High school. The following conditions will apply to this research:

7. All information be dealt within total confidentiality,
8. A copy of this research be submitted to the school on completion;
9. And if any major stress is found workshops be conducted so as to help the students cope with them.

We look forward to your next visit at our school where we will discuss the way forward and will assist you in any way possible.



APPENDIX C

CODES USED IN THE SPSS DATA CAPTURING

Define Labels: school

Variable Label: Name of School

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "not answered"
2 = "Mmabatho High School"
3 = "Lestane High School"
4 = "Mococo High School"

Define Labels: race

Variable Label: race group

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "not answered"
2 = "black"
3 = "coloured"
4 = "indian"
5 = "white"

Define Labels: hobbies

Variable Label: hobbies

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "not answered"
2 = "reading"
3 = "drawing"
4 = "poetry writing"
5 = "other"

Define Labels: age

Variable Label: age range

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "not answered"
2 = "16-17"
3 = "17-18"
4 = "18-above"

Define Labels: religion

Variable Label: religion

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "not answered"
2 = "catholic"
3 = "christianity"
4 = "hinduism"
5 = "islam"

Define Labels: sports

Variable Label: sports

Value Labels:

Value:

Value Label:

Add

Change

Remove

2 = "soccer"
3 = "cricket"
4 = "netball"
5 = "swimming"
6 = "other"

Define Labels: music

Variable Label: music

Value Labels:

Value:

Value Label:

Add

Change

Remove

2 = "rock"
3 = "pop"
4 = "rap"
5 = "jazz"
6 = "instrumental"

Define Labels: swls1

Variable Label: satisfaction with life scale

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "strongly disagree"
2 = "disagree"
3 = "slightly disagree"
4 = "neither agree nor disagree"
5 = "slightly agree"

Define Labels: swls1

Variable Label: satisfaction with life scale

Value Labels:

Value:

Value Label:

Add

Change

Remove

5 = "not at all agree"
6 = "agree"
7 = "strongly agree"
8 = "not answered"

Define Labels: seq1x20

Variable Label: self evaluation questionnaire 1-20

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "not at all"
2 = "somewhat"
3 = "moderately"
4 = "very much so"
5 = "not answered"

Define Labels: seq2x21

Variable Label: self evaluation questionnaire 21-40

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "almost never"
2 = "sometimes"
3 = "often"
4 = "almost always"
5 = "not answered"

Define Labels: str7

Variable Label: the strain response

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "rarely"
2 = "infrequently"
3 = "sometimes"
4 = "often"
5 = "always"

Define Labels: cope1

Variable Label: cope1

Value Labels:

Value:

Value Label:

Add

Change

Remove

1 = "I usually don't do this at all"
2 = "I usually do this a little bit"
3 = "I usually do this a medium amot"
4 = "I usually do this a lot"
5 = "not answered"

Define Labels: poms1

Variable Label: poms1

Value Labels:

Value:

Value Label:

Add

Change

Remove

0 = "not at all"
1 = "a little"
2 = "moderately"
3 = "quite a bit"
4 = "extremely"

SUMMARY OF DATA AS CAPTURED FROM THE QUESTIONNAIRES INTO SPSS VERSION 7.5

BIOGRAPHICAL INFORMATION										RADIO STATION	FATHER'S OCCUPATION	MOTHER'S OCCUPATIO N	SATISFACTI ON WITH LIFE SCALE	COPE		SELF - EVALUATIO N QUESTIONN	PROFILES OF MOOD STATES (POMS)	THE STRAIN RESPONSE (SR)	HIGHS AND LOWS OF TOTALS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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SUMMARY OF DATA AS CAPTURED FROM THE QUESTIONNAIRES INTO SPSS VERSION 7.5

BIOGRAPHICAL INFORMATION										RADIO STATION		FATHER'S OCCUPATION		MOTHER'S OCCUPATIO N		SATISFACTI ON WITH LIFE SCALE		COPE		SELF - EVALUATIO N QUESTIONN		PROFILES OF MOOD STATES (POMS)		THE STRAIN RESPONSE (SR)		HIGHS AND LOWS OF TOTALS								
AGE	RACE	GRADE	RELIGION	SPORTS	HOBBIES	MUSIC	TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL					
2	2	GRADE 11					3	2	3	3	1	1	1	1	1	28	145	104	189	63	High	High	High	High	High	High	High	High	High	low				
4	2						2	2	3	3	teacher	teacher	teacher	18	159	118	186	65	High	Low	High	High	High	High	High	High	High	High	High	low				
4	2						2	2	4	1	n/a	n/a	n/a	22	141	109	134	48	High	High	Low	High	High	High	High	High	High	High	High	low				
2	2						2	2	2	3	none	none	a cleaner	30	158	118	122	57	High	High	Low	High	High	High	High	High	High	High	High	low				
4	2						3	3	3	6	miner	miner	unemployed	31	140	111	132	24	High	High	Low	High	High	High	High	High	High	High	High	low				
4	2						4	2	2	4	radio bop	radio services	education	24	150	109	161	1	High	High	High	High	High	High	High	High	High	High	High	High	low			
1	2						2	2	3	2	bricklayer	bricklayer	housewife	12	155	95	102	36	High	Low	Low	High	High	High	High	High	High	High	High	Low	low			
4	2						4	2	2	4	radio bop	miner	1	125	103	127	32	Low	Low	Low	High	High	High	High	High	High	High	High	High	Low	low			
3	2						2	2	2	3	reverent	reverent	prof/nurse	16	140	93	93	15	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low			
4	2						2	2	2	5	radio bop	n/a	domestic w	15	144	94	105	67	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	high		
3	2						3	3	2	4	architect	architect	business	23	178	115	106	3	High	High	Low	High	High	High	High	High	High	High	High	High	Low	low		
4	2						4	2	4	4	radio bop	n/a	radio bop	13	160	95	178	64	High	Low	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	high		
2	2						2	2	2	4	teacher	teacher	teacher	20	130	79	123	21	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	
4	2						2	2	4	4	radio bop	n/a	police w	17	148	130	143	54	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	
3	2						2	2	2	2	maid	maid	1	24	128	84	106	31	Low	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	
4	2						2	2	3	2	radio bop	1	self emplo	14	150	100	124	68	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	high		
4	2						2	2	3	2	risunshine	1	farmer	10	145	92	113	60	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	
4	2						3	3	3	4	radio bop	1	1	15	133	88	135	46	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	
4	2						2	2	1	1	risunshine	mine	1	14	140	112	140	63	High	Low	Low	High	High	High	High	High	High	High	High	High	High	High	high	
4	2						2	2	2	4	rimotswedi	1	1	24	164	87	100	64	High	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	high		
2	2						3	4	2	1	1	1	1	28	167	107	43	60	High	High	Low	High	High	High	High	High	High	High	High	High	Low	low		
3	2						3	2	2	3	rimotswedi	none	none	30	154	112	136	44	High	High	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
2	2						5	4	4	4	radio bop	none	tailor	24	136	83	120	18	High	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low
3	2						4	2	2	3	radio bop	1	d/worker	25	143	114	111	18	High	High	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
4	2						2	2	2	2	radio bop	1	nurse	19	134	100	109	55	High	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low
4	2						2	2	1	2	1	1	1	26	159	111	112	37	High	High	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
3	2						2	2	2	3	rimotswedi	d/warden	d/maker	28	150	114	123	48	High	High	Low	High	High	High	High	High	High	High	High	High	High	High	Low	low
2	2						3	4	2	3	risunshine	1	nurse	12	127	87	143	70	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	high	
3	2						2	5	4	4	risunshine	farmer	housewife	29	136	128	176	69	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	high
2	3						2	2	3	3	rimotswedi	mechanic	housewife	14	160	103	138	59	High	Low	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
4	2						4	2	4	4	risunshine	1	1	24	175	90	49	76	High	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	High	High	high	
4	2						4	2	4	4	rimotswedi	1	1	19	141	103	108	42	High	Low	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
2	2						3	5	2	1	radio bop	1	1	18	145	111	145	50	High	Low	High	High	High	High	High	High	High	High	High	High	High	Low	low	
4	2						7	4	2	6	risunshine	carpenter	1	24	160	107	160	55	High	High	High	High	High	High	High	High	High	High	High	High	High	High	Low	low
3	2						3	3	2	3	1	1	1	35	132	117	160	62	High	High	High	High	High	High	High	High	High	High	High	High	High	Low	low	
3	2						3	4	2	4	rimotswedi	1	1	26	158	101	88	35	High	High	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
3	2						4	2	3	3	rimotswedi	1	1	17	161	97	90	29	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low	
3	2						3	4	2	3	rimotswedi	1	1	16	162	119	105	41	High	Low	Low	High	High	High	High	High	High	High	High	High	High	Low	low	
4	2						4	2	1	1	radio bop	1	radio bop	17	170	91	120	48	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	low
4	2						4	2	2	1	radio bop	1	1	22	150	102	101	41	High	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	High	High	Low	low

SUMMARY OF DATA AS CAPTURED FROM THE QUESTIONNAIRES INTO SPSS VERSION 7.5

BIOGRAPHICAL INFORMATION										RADIO STATION	FATHER'S OCCUPATION	MOTHER'S OCCUPATIO N	SATISFACTI ON WITH LIFE SCALE	COPE	SELF - EVALUATIO N QUESTIONN	PROFILES OF MOOD STATES (POMS)	THE STRAIN RESPONSE (SR)	HIGHS AND LOWS OF TOTALS					
SEX	AGE	RACE	GRADE	RELIGION	SPORTS	HOBBIES	MUSIC	COPE	SWL									POMS	SEQ - 1	SEQ - 2			
GRADE 11																		24	Low	High	low	low	low
3	2	2	3	2	2	2	4	radio bob	unemployed	unemployed	none	26	121	92	93	57	Low	High	low	low	low		
2	2	2	2	2	2	2	5	radio bob	bus driver	unemployed	none	24	141	95	68	27	High	High	low	low	low		
3	2	2	3	2	3	4	4	metro fm	unemployed	none	none	28	142	82	137	58	High	High	low	low	low		
2	2	2	3	2	2	3	4	radio bob	none	none	none	28	130	93	160	64	Low	High	high	low	high		
3	2	2	3	2	2	4	4	radio bob	none	unemployed	unemployed	25	132	81	152	38	Low	High	high	low	low		
3	2	2	6	2	2	2	6	r/sunshine	none	none	none	15	128	108	154	62	Low	Low	high	high	low		
4	2	2	2	2	2	4	4	r/sunshine	none	housewife	housewife	18	141	96	125	39	High	Low	low	low	low		
4	2	2	3	2	2	3	4	radio bob	1	publicwork	publicwork	28	129	108	74	46	Low	High	low	high	low		
4	2	2	7	2	2	2	6	r/sunshine	unemployed	unemployed	none	31	128	109	155	64	Low	High	high	high	high		
GRADE 12																		18	Low	High	low	low	low
3	2	2	3	3	2	2	4	r/motswedi	unemployed	unemployed	kitchen	29	121	78	49	18	Low	High	low	low	low		
4	2	2	1	2	2	2	4	r/sunshine	none	none	none	30	149	109	125	33	High	High	low	high	low		
4	2	2	3	2	2	2	4	radio bob	miner	unemployed	unemployed	28	146	114	61	27	High	High	low	high	low		
3	2	2	3	2	2	2	4	r/sunshine	none	none	kitchen	20	140	111	148	40	High	Low	high	high	low		
4	2	2	4	2	2	4	4	radio bob	none	domestic/w	domestic/w	24	165	104	178	72	High	High	high	high	high		
4	2	2	3	2	2	2	4	radio bob	unemployed	domestic/w	domestic/w	23	155	109	115	53	High	High	low	high	low		
4	2	2	3	2	2	2	3	r/motswedi	industry	1	1	23	171	117	92	15	High	High	low	high	low		
3	2	2	2	2	2	2	4	radio bob	unemployed	unemployed	unemployed	30	131	101	169	7	Low	High	high	high	low		
2	2	2	3	2	2	2	4	radio bob	carpenter	domestic/w	domestic/w	31	158	112	91	28	High	High	low	high	low		
2	2	2	3	2	2	2	4	r/sunshine	tag cash/c	none	none	31	139	104	144	49	High	High	high	high	low		
GRADE 11																		63	High	Low	high	high	high
3	2	2	3	5	2	2	6	radio bob	none	unemployed	unemployed	19	167	118	184	53	High	Low	high	high	low		
4	2	2	7	4	2	2	5	r/motswedi	none	kitchen	kitchen	22	141	103	67	45	High	High	low	high	low		
4	2	2	3	4	2	2	1	radio bob	painter	1	1	29	145	127	189	61	High	High	high	high	low		
4	2	2	3	4	2	2	6	r/sunshine	none	unemployed	unemployed	32	136	117	141	67	High	High	low	high	high		
3	2	2	3	4	2	2	2	r/sunshine	teacher	1	1	23	118	105	86	15	Low	High	low	high	low		
2	2	2	3	2	2	2	4	r/motswedi	unemployed	unemployed	unemployed	26	146	116	169	66	High	High	high	high	high		
2	2	2	3	4	2	3	3	radio bob	1	none	none	26	137	106	105	76	High	High	low	high	high		
2	2	2	3	4	2	2	6	r/sunshine	none	unemployed	unemployed	12	149	117	175	36	High	Low	high	high	low		
2	2	2	3	4	2	4	4	r/sunshine	unemployed	domestic/w	domestic/w	23	89	94	158	41	Low	High	high	low	low		
3	2	2	6	2	2	2	4	r/motswedi	none	none	none	29	152	116	164	37	High	High	high	high	low		
GRADE 12																		59	High	Low	high	high	low
3	2	2	3	4	2	2	3	radio bob	unemployed	unemployed	none	12	146	98	161	59	High	Low	high	low	low		
2	2	2	3	4	2	2	3	radio bob	carpenter	domestic/w	domestic/w	16	147	90	74	33	High	Low	low	low	low		
4	2	2	3	4	2	2	4	r/sunshine	mining	none	none	26	131	96	158	20	Low	High	high	low	low		
3	2	2	3	4	2	2	1	r/motswedi	unemployed	none	none	12	140	121	204	37	High	Low	high	high	low		
2	2	2	2	4	2	3	3	radio bob	none	social/w	social/w	23	124	99	42	72	Low	High	low	low	high		
4	2	2	2	4	2	2	3	jacaranda	Jhb-Ok	unemployed	unemployed	6	140	103	104	40	High	Low	low	high	low		
3	2	2	3	4	2	3	3	r/sunshine	none	kitchens	kitchens	16	155	104	138	54	High	Low	low	high	low		
2	2	2	3	4	2	2	3	radio bob	stock cont	unemployed	unemployed	26	116	100	39	24	Low	High	low	low	low		
4	2	2	8	4	2	2	3	radio bob	unemployed	teacher	teacher	32	166	137	175	61	High	High	high	high	low		
4	2	2	2	4	2	2	2	radio bob	guard	1	1	32	180	140	211	51	High	High	high	high	low		

APPENDIX E

LETEANE HIGH SCHOOL

age range * Sex of student Crosstabulation

		Sex of student			
		Male		Female	
		No	%	No	%
age range	16-17	3	15%	5	25%
	17-18	3	15%	8	40%
	18-above	14	70%	7	35%
	Total	20	100%	20	100%

MMABATHO HIGH SCHOOL

age range * Sex of student Crosstabulation

		Sex of student			
		Male		Female	
		No	%	No	%
age range	16-17	5	25%	10	50%
	17-18	12	60%	8	40%
	18-above	3	15%	2	10%
	Total	20	50%	20	50%

MOCOCE HIGH SCHOOL

age range * Sex of student Crosstabulation

		Sex of student			
		Male		Female	
		No	%	No	%
age range	16-17	5	25%	6	30%
	17-18	7	35%	7	35%
	18-above	8	40%	7	35%
	Total	20	100%	20	100%

THREE SCHOOLS COMBINED

age range * Sex of student Crosstabulation

		Sex of student			
		Male		Female	
		No	%	No	%
age range	16-17	13	22%	21	35%
	17-18	22	37%	23	38%
	18-above	25	42%	16	27%
	Total	60	100%	60	100%

NWU
LIBRARY

APPENDIX F

Where have all the

Childhood used to be a time of freedom, fun and realistic parental expectations. But now the pressure of modern life is taking its toll on our children – even in the most well-ordered families a child could be at risk. Lee Currie investigates



Where have

Childhood used to be a time of freedom, fun and realistic parental expectations. But now the pressure of modern life is taking its toll on our children – even in the most well-ordered families a child could be at risk. Lee Currie investigates

Jenna, 11-year-old. She loved school and her marks were consistently high. Then suddenly they dropped dramatically and she became quiet and withdrawn. At home she complained of stomach ache and would beg not to go to school. When her parents insisted, she would vomit at school and her mother would be called in to take her home. Eventually she refused to leave home at all. Her teacher suggested counselling.

'Jenna's parents were emigrating and they hadn't talked the issue through with her,' says Alex Keen, the Durban clinical social worker who counselled Jenna. 'She would come home and parts of her bedroom would've disappeared! (The furniture was being sold off.) Jenna was in the middle of all the frantic activity of emigrating but not part of it. She began to feel very insecure and worried that if she went away her mother or father might disappear. She felt that by staying at home she might be able to control what was happening.'

'Children of earlier generations could ride around freely on bikes and just be children,' says Keen. 'But now it's not safe, so parents are keeping children at home and building in lots of extramural activities, which put more pressure on them. Everything seems to be competitive, and children are entering the rat race at a very young age. They're doing things to win rather than for the fun of it.'

Counselling psychologist Justine Schapers, who works at the Children's Assessment and Therapy Centre in Durban, adds, 'Academic expectations are high for children of this age. For example, class projects used to be fairly simple, but with new information technology, even nine-year-olds are expected to produce detailed and sophisticated projects.' Justine runs a social skills group for children aged nine to 12 aimed at boosting self-esteem and developing coping skills.

It's a sad indictment of modern childhood that when FAIRLADY asked a school counsellor to do an informal survey of the concerns of a group of Grade 7s, most of the

Everything seems to be competitive, and children are joining the rat race at a very young age'

'Jenna's parents should've told her what was going on from the start and then kept her informed as things progressed. This would've helped reassure her and make her feel more in control,' says Keen.

Adults often assume that 'kids don't have any real worries'. But children don't have an adult's ability to solve problems or put things into perspective, and their stress load can overwhelm them. If 'bottled up', it can result in emotional and behavioural problems.

Most childcare experts agree that children are under social and academic pressure much earlier than they should be. Parents may foresee some tumult during the teen years but don't usually expect this in the 10- to 12-year-old group. Yet children of this sensitive 'in-between' age go through a phase of emotional, physical and intellectual development that often surprises parents with its intensity.

children were worried about not passing exams and many feared they would not find jobs when they left school.

High on the list of other concerns is not being part of a group, not conforming to their peers' dress code and the timing of body changes – too early can cause embarrassment, too late makes them feel left out (see 'What pre-teens worry about').

Experts advise parents not to trivialise their children's concerns, no matter how 'silly' they may seem. 'Try to imagine what it must be like and talk it through with them,' says Cheryl Sol, a Durban clinical psychologist.

The importance of empathising is borne out by a story told by Debbie, a legal secretary who's now 26 but who vividly remembers waiting for her dad to come home from work, wracked with anxiety, imagining all sorts of calamities – him being in a car accident or shot by robbers.

What pre-teens worry about

Here are extracts from the Grade 7 survey:

- 'My parents are divorced. My worst fear is losing contact with my dad, as I live with my mom.'
- 'My fear is that I will be raped and get Aids.'
- 'Every year jobs become more scarce and with a poor education you have almost no chance of earning a living, so exams are very important and this makes me tense.'
- 'Not being in a group of friends.'
- 'My biggest problem is trying to talk to my mother.'
- 'What worries me is failing Grade 7. I'd have no friends because they'll be at high school.'
- 'When you get zits and sweat a lot.'
- 'My biggest worry is that I keep getting bad marks even if I learn hard.'
- 'My dad won't let me shave my legs.'

Signs of stress overload

Most parents have the skills to help their child talk things through, but seek professional help if you feel you can't cope. The most important thing is to deal with the problem. Symptoms include:

- School: lack of interest, drop in marks, trying to get out of going to school. Teachers may complain that a child is withdrawing or, alternatively, behaving badly.
- Inability to sit still or concentrate.
- Loss of interest in hobbies and sports.
- Becoming withdrawn, dispirited or lethargic.
- Sleep disturbances.
- Acting up: for example being moody, spiteful or rebellious, or possibly regressing to behaviour characteristic of a younger age.
- Self-mutilation, where children hurt themselves by, for example, cutting or piercing themselves.
- Physical symptoms such as stomach upsets (nausea, diarrhoea) chronic fatigue, headaches.

What parents can do

Build self-esteem. Building up your child's confidence will allow her to feel comfortable within herself and therefore less affected by outside pressures.

Don't be a pushy parent. Working for their own pleasure is far better for children than working to please Mom and Dad. Encourage children to achieve by setting goals and targets with them.

Be sensitive to children's feelings and try to empathise. Let them know that feeling stressed is normal and that they're not alone — other children have the same worries and fears. Help them choose their own options and solutions.

Keep lines of communication open. Even if your child doesn't appear to want to discuss anything with you, let her know you're nevertheless available to talk if something is bothering her. Encourage conversation by spending time with her, doing something you both enjoy.

Allow children to let off steam. Most kinds of sports do wonders for reducing stress.

Keep them informed of any major changes. 'Parents should be open and honest when discussing issues with their children, but at the same time not give them more information than they really need,' advises social worker Alex Keen.

Enlist the help of your child's teacher. If your child is unhappy and you suspect something is going on at school, have a quiet word with her teacher or the school counsellor.

Help your child prepare timeously for tests and exams. If she finds it hard to cope with tests and exams, setting targets and goals well in advance and helping to organise a schedule does help.

Examine your own reactions. If you panic easily or tend to overreact in stressful situations, chances are your child will pick up your 'vibes'.

Protect 'divorced' children. Ensure that conflict situations are kept well out of children's sight and hearing. Don't burden them with your problems. And never complain to them about your spouse. Divided loyalties can tear them apart.

Empower rather than frighten your child. While it's important that children are aware of the need for safety measures, be careful not to go overboard. Teach them safety measures such as how to use the alarm system and to lock up properly. Give them emergency telephone numbers. This will help them feel more in control.

Establish firm boundaries. Boundaries make children feel more secure and therefore more able to handle stressful situations (such as peer pressure). 'Rules should be in place and should be consistent,' says Keen. 'Children are a lot happier when they know what's allowed and what isn't.'

Where to get help

Childline: ☎ 0800 05-5555. A 24-hour telephone counselling and referral service for abused and traumatised children and their families.

Childline Family Centre: ☎ (031) 303-2222.

Childline Treatment Centre: ☎ (031) 312-0904.

Private counselling: Most medical aids will contribute towards professional counselling. Your GP should be able to recommend a professional suited to your child's problem.

Child Welfare Society: Johannesburg ☎ (011) 331-0171; Durban ☎ (031) 312-9313; Cape Town ☎ (021) 761-7130. Direct social work services to children under 12 years.

Department of Welfare: Johannesburg ☎ (011) 836-4321; Durban ☎ (031) 304-7411; Cape Town ☎ (021) 424-6020. Direct social work services to children aged 12 to 18 years.

Famsa: national office ☎ (011) 975-7106/7; Durban ☎ (031) 304-8991; Cape Town ☎ (021) 461-7360/1/2; Bloemfontein ☎ (051) 525-2395. **Family Life Centre (Famsa):** Johannesburg ☎ (011) 788-4784.

Child Emergency Service: ☎ 0800 12-3321. 24-hour telephonic counselling and referrals.

Children's Assessment and Therapy Centre: ☎ (031) 208-5117.

University counselling services: Most universities have counselling units for adults and children without the means for private counsellors.

'When he finally arrived, I would rush into his arms, sobbing with relief. He would ruffle my hair and tell me not to be such a "silly goose". My father's great, but I'll always feel a bit resentful that he didn't try to understand the way I felt.'

An unhappy home life and divorce are major triggers of childhood worries. 'Research shows it's the conflict between parents before divorce that causes the trauma for the children,' says Grace Ramiah, a senior counsellor at the Family and Marriage Society (Famsa). 'Some children blame themselves: some suffer depression or anxiety — about losing touch with or being rejected by the noncustodial parent and of relocating, with a subsequent loss of friends.'

Experts strongly advise professional counselling for children and adolescents who have endured severe trauma. This includes bereavement, violence and sexual abuse.

'When your child has suffered a trauma and she tells you about it, it is very important to listen without showing strong emotional reactions,' says Joan van Niekerk, director of Childline. 'Even a deep

intake of breath can inhibit a child from disclosing the situation. It's also important that treatment begins as soon after the trauma as possible to prevent potential long-term psychological problems.'

A case in point is the tragic story of Sarah, a nine-year-old girl who was raped by a neighbour on her way home from school.

Sarah was taken to the police but wasn't offered immediate therapy, and her mother lacked the resources to take her for private counselling. The little girl was so traumatised that when she went to court to testify, she couldn't speak at all. The case was postponed in the hopes that she would be able to talk next time. Eventually Sarah's teacher referred her to Childline.

With the court date less than a month away, Sarah is still too traumatised to speak about the rape. If it's mentioned, she wrings her hands, tears cloth or pieces of paper and is generally quite destructive. 'Sometimes she will weep profusely,' says Joan, 'but even her crying is completely silent. Her body will heave, and the tears will stream down her face, but there won't be as much as a sob.'

APPENDIX G

Statistics South Africa Census96: Community profile - Labour force Geographical areas by Employment status, Population group and Gender for Weighted person

	Employed											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	418311	219095	7221	5045	2661	1057	51881	31680	2171	959	482245	257836
Mmabatho	24232	19606	885	548	343	184	1125	754	98	80	26683	21172

	Unemployed, looking for work											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	181384	255504	2554	2998	133	148	2083	2208	666	893	186820	261751
Mmabatho	16991	22709	233	284	11	17	38	51	54	79	17327	23140

	Not working - not looking for work											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	26800	49824	300	493	19	53	355	839	112	190	27586	51399
Mmabatho	1750	2963	15	44	2	13	8	13	6	21	1781	3054

	Not working - housewife/home-maker											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	2054	94449	30	2404	6	1216	189	23455	2	447	2281	121971
Mmabatho	138	5304	1	183	1	97	2	216	0	12	142	5812

	Not working - scholar/full-time student											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	184142	201688	2176	2169	426	404	9530	9703	874	899	197148	214863
Mmabatho	15049	17094	199	197	74	63	104	132	67	71	15493	17557

	Not working - pensioner/retired person											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	67115	110219	1368	1687	133	222	12160	13213	296	540	81072	125881
Mmabatho	5347	8992	106	164	15	12	55	85	20	37	5543	9290

	Not working - disabled person											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	11869	9568	166	144	26	20	460	335	57	41	12578	10108
Mmabatho	951	761	14	19	3	3	3	6	6	4	977	793

	Not working - not wishing to work											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	10963	22967	135	210	9	23	147	192	50	89	11304	23481
Mmabatho	699	1529	11	20	1	8	1	2	2	7	714	1566

	Not working - none of the above											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	36979	48205	570	606	156	227	2081	2192	610	553	40396	51783
Mmabatho	3392	4505	39	48	4	30	16	28	38	33	3489	4644

	Unspecified											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	1054	874	30	30	9	11	58	60	29	26	1180	1001
Mmabatho	47	51	1	0	0	0	0	0	4	3	52	54

	NA: Aged <15											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	523504	532057	7535	7739	1442	1343	25902	24982	3286	3302	561669	569423
Mmabatho	43231	44682	794	760	216	209	530	483	232	272	45003	46406

	NA: Institution											
	African/Black		Coloured		Indian/Asian		White		Unspecified		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North West	39769	10293	659	381	210	145	4546	4504	372	171	45556	15494
Mmabatho	2701	1795	38	6	12	5	286	105	10	1	3047	1912

Created on 11/13/00

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Dear Student

I Deepa Daya am a master's student in clinical psychology at the University of North West. At present I am conducting a research in which I have chosen your school to participate.

Your colleagues and yourself were selected randomly and not based on any academic records. This research is to determine if there are any stressors that the students are experiencing.

Your involvement is only to complete the questionnaires attached to this booklet. Please follow the instructions to the best of your ability.

STRESS EXPERIENCED BY STUDENTS IN THREE HIGH SCHOOLS IN GRADE ELEVEN AND TWELVE LOCATED IN AND AROUND THE CAPITAL CITY OF MMABATHO IN THE NORTH WEST PROVINCE

CODE: _____ (for official use only)

TAKE A FEW MINUTES TO READ THE FOLLOWING BEFORE YOU START!

1. All information that you provide will be dealt with in complete confidentiality.
2. There are five questionnaires in total.
 - 2.1 Self – Evaluation Questionnaire STAI FORM X-1 & X-2;
 - 2.2 POMS – Profile of Mood States;
 - 2.3 The Strain Response;
 - 2.4 Satisfaction with Life Scale and
 - 2.5 COPE
3. Please answer each questionnaire, keeping in mind that each question must be answered to the best of your ability. **Don't avoid any question!**
4. There are no right or wrong answers, and responses must indicate what you feel rather than what "most people" do.
5. Instructions on how to answer the questionnaires are located above each questionnaire. **Please read them before you start answering.**
6. If you are not sure on how to answer any of the questions, do not hesitate to ask your monitor.
7. You have the freedom to withdraw from the process at any time without any penalties for doing so.

Thank you for your co-operation.

BIOGRAPHICAL INFORMATION

Date: _____

Name of School: _____

Please tick the appropriate block

SEX

Male

☐

Female

☐

AGE

16 - 17

☐

17 - 18

☐

18 - above

☐

RACE GROUP

Black

☐

Coloured

☐

Indian

☐

White

☐

GRADE

Grade 11

☐

Grade 12

☐

RELIGION

Catholic

☐

Christianity

☐

Hinduism

☐

Islam

☐

Jewish

☐

Zionist

☐

Other

LEISURE

Sports

Soccer

☐

Cricket

☐

Netball

☐

Swimming

☐

Other

Hobbies

Reading

☐

Drawing

☐

Poetry writing

☐

Other

Music

Rock

☐

Pop

☐

Rap

☐

Jazz

☐

Instrumental

☐

Favourite radio station

PARENTS OCCUPATION

Father

Mother

SATISFACTION WITH LIFE SCALE

(Diener, Emmons, Larson & Griffins, 1985)

Below are five statements with which you may agree or disagree. Using the 1 - 7 scale below, indicate your agreement with each item by crossing the appropriate number in line with that item.

- 1 = strongly disagree
- 2 = disagree
- 3 = slightly disagree
- 4 = neither agree nor disagree
- 5 = slightly agree
- 6 = agree
- 7 = strongly agree

1. In most ways my life is close to my ideal

1	2	3	4	5	6	7
---	---	---	---	---	---	---

2. The conditions of my life are excellent

1	2	3	4	5	6	7
---	---	---	---	---	---	---

3. I am satisfied with my life

1	2	3	4	5	6	7
---	---	---	---	---	---	---

4. So far I have gotten the important things I want in life

1	2	3	4	5	6	7
---	---	---	---	---	---	---

5. If I could live my life over, I would change almost nothing

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Total _____

COPE

(Carver, Scheier & Weintraub, 1989)

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, difficult events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

There are no right or wrong answers, and responses must indicate what you do rather than what "most people" do.

Indicate how much your reaction are described by each statement from:

1	I usually don't do this at all
2	I usually do this a little bit
3	I usually do this a medium amount
4	I usually do this a lot

No.	Description	1	2	3	4
1	I ask people who have had similar experiences what they did.	1	2	3	4
2	I refuse to believe it has happened.	1	2	3	4
3	I try to grow as a person as a result of the experience.	1	2	3	4
4	I force myself to wait for the right time to do something.	1	2	3	4
5	I put aside other activities in order to concentrate on this.	1	2	3	4
6	I take additional action to try to get rid of the problem.	1	2	3	4
7	I get used to the idea that it happened.	1	2	3	4
8	I talk to someone about how I feel.	1	2	3	4
9	I think about how I might best handle the problem.	1	2	3	4
10	I put my trust in God.	1	2	3	4
11	I sleep more than usual.	1	2	3	4
12	I drink alcohol or take drugs, in order to think about it less.	1	2	3	4
13	I admit to myself that I can't deal with it, and quit trying.	1	2	3	4
14	I let my feelings out.	1	2	3	4
15	I try to get emotional support from friends or relatives.	1	2	3	4
16	I say to myself: "this isn't real".	1	2	3	4
17	I try to see it in a different light, to make it seem more positive.	1	2	3	4
18	I make sure not to make matters worse by acting too soon	1	2	3	4
19	I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
20	I make a plan of action.	1	2	3	4
21	I learn to live with it.	1	2	3	4
22	I try to get advice from someone about what to do.	1	2	3	4

23 I do what has to be done, one step at a time.

1	2	3	4
---	---	---	---

24 I pray more than usual.

1	2	3	4
---	---	---	---

25 I turn to work or other substitute activities to take my mind of things.

1	2	3	4
---	---	---	---

26 I give up the attempt to get what I want.

1	2	3	4
---	---	---	---

27 I get upset and let my emotions out.

1	2	3	4
---	---	---	---

28 I get sympathy and understanding from someone.

1	2	3	4
---	---	---	---

29 I pretend that it hasn't really happened.

1	2	3	4
---	---	---	---

30 I look for something good in what is happening.

1	2	3	4
---	---	---	---

31 I restrain myself from doing anything to quickly.

1	2	3	4
---	---	---	---

32 I take direct action to get around the problem.

1	2	3	4
---	---	---	---

33 I expect that this has happened and that it can't be changed.

1	2	3	4
---	---	---	---

34 I talk to someone who could do something concrete about the problem.

1	2	3	4
---	---	---	---

35 I try to come up with a strategy about what to do.

1	2	3	4
---	---	---	---

36 I go to movies or watch TV to think about it less.

1	2	3	4
---	---	---	---

37 I try to find comfort in my religion.

1	2	3	4
---	---	---	---

38 I focus on dealing with the problem and if necessary let other things slide a little.

1	2	3	4
---	---	---	---

39 I reduce the amount of effort I'm putting into solving the problem.

1	2	3	4
---	---	---	---

40 I feel a lot of emotional distress and I find myself expressing those feelings a lot.

1	2	3	4
---	---	---	---

41 I talk to someone to find out more about the situation.

1	2	3	4
---	---	---	---

42 I act as though it hasn't even happened.

1	2	3	4
---	---	---	---

43 I learn something from the experience.

1	2	3	4
---	---	---	---

44 I hold off doing anything about it until the situation permits.

1	2	3	4
---	---	---	---

45 I concentrate my efforts on doing something about it.

1	2	3	4
---	---	---	---

46 I keep myself from getting distracted by other thoughts or activities.

1	2	3	4
---	---	---	---

47 I think hard about what steps to take.

1	2	3	4
---	---	---	---

48 I accept the reality of the fact that it happened.

1	2	3	4
---	---	---	---

49 I discuss my feelings with someone.

1	2	3	4
---	---	---	---

50 I just give up trying to reach my goal.

1	2	3	4
---	---	---	---

51 I seek God's help.

1	2	3	4
---	---	---	---

52 I daydream about things other than this.

1	2	3	4
---	---	---	---

53 I get upset, and am really aware of it.

1	2	3	4
---	---	---	---

SELF-EVALUATION QUESTIONNAIRE

Developed by C.D. Spielberger, R.L. Gorsuch and R. Lushene

STAI FORM X-1

INSTRUCTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate block 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.

VERY MUCH SO
MODERATELY SO
SOMEWHAT
NOT AT ALL

1 I feel calm	1	2	3	4
2 I feel secure.....	1	2	3	4
3 I am tense.....	1	2	3	4
4 I am regretful.....	1	2	3	4
5 I feel at ease.....	1	2	3	4
6 I feel upset.....	1	2	3	4
7 I am presently worrying over possible misfortunes.....	1	2	3	4
8 I feel rested.....	1	2	3	4
9 I feel anxious.....	1	2	3	4
10 I feel comfortable.....	1	2	3	4
11 I feel self-confident.....	1	2	3	4
12 I feel nervous.....	1	2	3	4
13 I am jittery.....	1	2	3	4
14 I feel "high strung".....	1	2	3	4
15 I am relaxed.....	1	2	3	4
16 I feel content.....	1	2	3	4
17 I am worried.....	1	2	3	4
18 I feel over-excited and "rattled".....	1	2	3	4
19 I feel joyful.....	1	2	3	4
20 I feel pleasant.....	1	2	3	4

Continued on STAI FORM X-2

SELF-EVALUATION QUESTIONNAIRE

STAI FORM X-2

INSTRUCTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate block 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	☐ 1	☐ 2	☐ 3	☐ 4
22 I tire quickly.....	☐ 1	☐ 2	☐ 3	☐ 4
23 I feel like crying.....	☐ 1	☐ 2	☐ 3	☐ 4
24 I wish I could be as happy as others seem to be.....	☐ 1	☐ 2	☐ 3	☐ 4
25 I am losing out on things because I can't make up my mind soon enough.....	☐ 1	☐ 2	☐ 3	☐ 4
26 I feel rested.....	☐ 1	☐ 2	☐ 3	☐ 4
27 I am "calm, cool, and collected".....	☐ 1	☐ 2	☐ 3	☐ 4
28 I feel that difficulties are piling up so that I cannot overcome them.....	☐ 1	☐ 2	☐ 3	☐ 4
29 I worry too much over something that really doesn't matter.....	☐ 1	☐ 2	☐ 3	☐ 4
30 I am happy.....	☐ 1	☐ 2	☐ 3	☐ 4
31 I am inclined to take things hard.....	☐ 1	☐ 2	☐ 3	☐ 4
32 I lack self-confidence.....	☐ 1	☐ 2	☐ 3	☐ 4
33 I feel secure.....	☐ 1	☐ 2	☐ 3	☐ 4
34 I try to avoid facing a crisis or difficulty.....	☐ 1	☐ 2	☐ 3	☐ 4
35 I feel blue.....	☐ 1	☐ 2	☐ 3	☐ 4
36 I am content.....	☐ 1	☐ 2	☐ 3	☐ 4
37 Some unimportant thought runs through my mind and bothers me.....	☐ 1	☐ 2	☐ 3	☐ 4
38 I take disappointments so keenly that I can't put them out of my mind.....	☐ 1	☐ 2	☐ 3	☐ 4
39 I am a steady person.....	☐ 1	☐ 2	☐ 3	☐ 4
40 I get in a state of tension or turmoil as I think over my recent concerns and interests.....	☐ 1	☐ 2	☐ 3	☐ 4

POMS - PROFILE OF MOOD STATES

INSTRUCTIONS: Below is a list of words that describe feelings people have. Please read each one carefully. Then cross the ONE number next to the word on the left which best describes HOW YOU HAVE BEEN FEELING THE PAST WEEK, INCLUDING TODAY. The meaning of each number is as follows:

	0- NOT AT ALL	1- A LITTLE	2- MODERATELY	3- QUITE A BIT	4- EXTREMELY
1 Friendly	☐	☐	☐	☐	☐
2 Tense	☐	☐	☐	☐	☐
3 Angry	☐	☐	☐	☐	☐
4 Worn out	☐	☐	☐	☐	☐
5 Unhappy	☐	☐	☐	☐	☐
6 Clearheaded	☐	☐	☐	☐	☐
7 Lively	☐	☐	☐	☐	☐
8 Confused	☐	☐	☐	☐	☐
9 Sorry for things done	☐	☐	☐	☐	☐
10 Shaky	☐	☐	☐	☐	☐
11 Listless	☐	☐	☐	☐	☐
12 Peeved	☐	☐	☐	☐	☐
13 Considerate	☐	☐	☐	☐	☐
14 Sad	☐	☐	☐	☐	☐
15 Active	☐	☐	☐	☐	☐
16 On Edge	☐	☐	☐	☐	☐
17 Grouchy	☐	☐	☐	☐	☐
18 Blue	☐	☐	☐	☐	☐
19 Energetic	☐	☐	☐	☐	☐
20 Panicky	☐	☐	☐	☐	☐
21 Hopeless	☐	☐	☐	☐	☐
22 Relaxed	☐	☐	☐	☐	☐
23 Unworthy	☐	☐	☐	☐	☐
24 Spiteful	☐	☐	☐	☐	☐
25 Sympathetic	☐	☐	☐	☐	☐
26 Uneasy	☐	☐	☐	☐	☐
27 Restless	☐	☐	☐	☐	☐
28 Unable to concentrate	☐	☐	☐	☐	☐
29 Fatigued	☐	☐	☐	☐	☐
30 Helpful	☐	☐	☐	☐	☐
31 Annoyed	☐	☐	☐	☐	☐
32 Discouraged	☐	☐	☐	☐	☐
33 Resentful	☐	☐	☐	☐	☐
34 Nervous	☐	☐	☐	☐	☐
35 Lonely	☐	☐	☐	☐	☐
36 Miserable	☐	☐	☐	☐	☐
37 Muddled	☐	☐	☐	☐	☐
38 Cheerful	☐	☐	☐	☐	☐
39 Bitter	☐	☐	☐	☐	☐
40 Exhausted	☐	☐	☐	☐	☐
41 Anxious	☐	☐	☐	☐	☐
42 Ready to fight	☐	☐	☐	☐	☐
43 Good natured	☐	☐	☐	☐	☐
44 Gloomy	☐	☐	☐	☐	☐
45 Desperate	☐	☐	☐	☐	☐
46 Helpless	☐	☐	☐	☐	☐
47 Rebellious	☐	☐	☐	☐	☐
48 Helpless	☐	☐	☐	☐	☐
49 Weary	☐	☐	☐	☐	☐
50 Bewildered	☐	☐	☐	☐	☐
51 Alert	☐	☐	☐	☐	☐
52 Deceived	☐	☐	☐	☐	☐
53 Furious	☐	☐	☐	☐	☐
54 Efficient	☐	☐	☐	☐	☐
55 Trusting	☐	☐	☐	☐	☐
56 Full of Pep	☐	☐	☐	☐	☐
57 Bad tempered	☐	☐	☐	☐	☐
58 Worthless	☐	☐	☐	☐	☐
59 Forgetful	☐	☐	☐	☐	☐
60 Carefree	☐	☐	☐	☐	☐
61 Terrified	☐	☐	☐	☐	☐
62 Guilty	☐	☐	☐	☐	☐
63 Vigorous	☐	☐	☐	☐	☐
64 Uncertain about things	☐	☐	☐	☐	☐
65 Bushed	☐	☐	☐	☐	☐
HAVE YOU ANSWERED ALL THE QUESTIONS?					☐

The Strain Response

INSTRUCTIONS: Our natural physical and psychological responses to excessive pressure are called "strain". The following inventory presents items that are common strain responses. Indicate how often *during the past few weeks* you have experienced each of these responses by writing the appropriate number in the blank beside that response.

0 = Never	1 = Rarely	2 = Infrequently	3 = Sometimes	4 = Often	5 = Always
-----------	------------	------------------	---------------	-----------	------------

		Appropriate No.
1	I feel unhealthy	
2	I feel weak	
3	I feel dizzy or lightheaded.	
4	I have headaches	
5	I have an upset stomach or intestinal problems	
6	I have sweaty and/or trembling hands	
7	I have shortness of breath and I sigh frequently	
8	I feel tense, "uptight," fidgety, nervous.	
9	I feel depressed or remorseful	
10	I feel restless and unable to concentrate	
11	I feel irritable	
12	I feel disorientated or overwhelmed	
13	I have misdirected anger	
14	I eat too much	
15	I have a loss of appetite	
16	I have difficulty falling asleep or staying asleep	
17	I have difficulty getting up in the morning	
18	I feel tired, have low energy and excessive fatigue	
19	I like myself less	
20	I think about suicide	
21	I am less communicative	
Total Score		