FACTORS CAUSING STRESS AMONG CHILDREN IN BLACK SECONDARY SCHOOLS IN KWAZULU

NZUZO JOSEPH LLOYD MAZIBUKO
(B.PAED.; B.ED.)

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 SUPERVISOR: Prof. Dr. J.L. Marais

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Potchefstroom, November 1992
PROLOGUE

A Stress Management Prayer

Thank you for another day of living and loving;
Thank you for my health, and
Thank you for everything you have given me.
Please continue to guide and support me as I strive
to live my life and do my work
With simplicity, in the here and now, and in a calm
and peacefully relaxed manner.
With positive optimism, and assertion and confrontation
toward self and others where appropriate.
With love, care, and concern for self and other, and
without anxiety, worry, fear, and depression.
Striving to make stress eustress and not distress,
and to live my life as dynamically, authentically,
and creatively as possible.

(Schultz and Heuchert, 1983:157)
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The opinions that are expressed in this study and the conclusions that were reached, are those of the author and are not ascribed to the Department of Education and Training, or the Department of Educational Psychology, Guidance and Orthopedagogics of the PU for CHE.
Dedicated to my aunts, Lindy and Happy, my brothers, Bennedict and Michael, and my sisters, Bennedictor and Maria
ABSTRACT

FACTORS CAUSING STRESS AMONG CHILDREN IN BLACK SECONDARY SCHOOLS IN KWAZULU

The purpose of this research project was to:

- determine factors causing stress in children in Black Secondary Schools in KwaZulu;
- highlight the effects of these stressful experiences on the psychosomatic-spiritual being of the adolescent; and
- give some guidelines to ways of controlling, managing and combating stress in Black schools.

The method of research entailed an empirical investigation in which 526 standards six to ten pupils from 15 secondary schools in the Ladysmith area of KwaZulu were involved. In order to determine the incidence of stress among these pupils and to obtain biographical data and information on stress, each of these pupils had to complete a questionnaire which had been developed by the researcher.

Based on the biographical data gathered, it was concluded that the following groups of pupils were more prone to stress:

- Girls
- Std. 6, 7 and 9 pupils
- Pupils from the rural areas
- Pupils in schools with an enrollment of over 600
- Pupils in townships secondary schools
- Pupils in classes with over 35 pupils per class

The questionnaire also revealed that during 1991-1992 the majority of pupils had manifested the following problems because of stressful pressures in school:

- nervousness, anxiety and exertion; tension headache; the urge to dodge certain lessons produced by the unbearable incompetence of a subject teacher; cheating; depression; feeling of inadequacy as a person; mental exhaustion; poor attention
span; reading difficulties; migraine headaches; poor memory; acting before thinking; and physical exhaustion.

- a poor vocabulary; grammar difficulties; comprehension difficulties; study methods difficulties; and poor vocational orientation.

The ten most stressful school factors which were revealed are:

- poor library facilities and stock; no Educational Assistance Services in the school; classes too crowded; poor laboratory facilities and equipment; inadequate supply of books and stationary; inadequate facilities in classrooms; unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school; non-involvement of children in the management and decision-making of school policies; and tension accompanying the late release of Matric Examination results by the Department of Education and Training.

The findings further revealed that very little is done in this region to offer educational support and assistance to children. The majority of the pupils stated that their schools did not have the following auxiliary programmes:

- Panel for Identification, Diagnosis and Assistance (PIDA); In-school counselling; Cooperative learning; Teaching lessons on stress; Heads of Department (H.O.D.'s) responsible for School Guidance Services; Guidance teachers responsible for the teaching of School Guidance; Textbooks for School Guidance learning and teaching; a Guardianship or mentorship system; and the opportunity to freely talk out their problems.

In conclusion, it can be stated that to address the impact of debilitating stress in the secondary schools for the Blacks in South Africa will require ongoing commitment and effort at a variety of levels, as well as the reactivation and use of an action-research orientation. Adaptive processes, not absolute solutions, should be the highest aspiration of educators and parents.
UITREKSEL

FAKTORE WAT STRES IN SKOLIERE AAN SWART SEKONDÊRE SKOLE IN KWAZULU VEROORSAAK

Die doel van die ondersoek was om:

• faktore vas te stel wat stres veroorsaak by skoliere in Swart sekondêre skole in KwaZulu;
• die effek van stresvolle ondervindings op die psigosomaties-geestelike wese van die adolesente uit te lig; en
• om sekere riglyne te gee oor hoe om stres in Swart skole te beheer en te beveg.

Die metode wat gevolg is, was 'n empiriese ondersoek waarin 526 leerlinge vanaf standerds ses tot tien in 15 sekondere skole in die Ladysmith gebied van KwaZulu betrokke was. Om die insidensie van stres by die skoliere vas te stel en om biografiese data en inligting oor stres te bekom, is elk van die leerlinge gevra om 'n vraelys in te vul wat deur die navorser ontwikkel is.

Uit die biografiese data wat ingesamel is, was die slotsom waartoe gekom is dat die volgende groepe leerlinge 'n groter neiging tot stres getoon het:

• Meisies
• Skoliere in Standerds 6, 7, en 9
• Skoliere uit plattelandse gebiede en sekondêre skole in dorpsgebiede
• Skoliere uit skole met 'n studentetal van meer as 600
• Skoliere uit klasse met meer as 35 leerlinge per klas

Die vraelys het ook aangetoon dat die meerderheid leerlinge in die periode 1991-1992 die volgende probleme as gevolg van die stresvolle omstandighede getoon het:

• Senuagtigheid, angstigheid en oormatige inspanning; spanningshoofpyn; neiging om van sekere klasse weg te bly omdat die vakonderwyser onbevoeg is; kullery; depressie; gevoel van ontoereikendheid as persoon; geestelike uitputting; swak konsentrasievermoë; leesprobleme; migraine hoofpyne; swak geheue; onnadenkende handeling; en fisiese uitputting.
Beperkte woordeskat; grammatikale probleme; begripsprobleme; probleme met studiemetodes; en swak beroepsoriëntasie.

Die tien faktore in die skool self wat die meeste stres veroorsaak het, was die volgende:

• Swak biblioteekfasiliteite en beperkte boekvoorraad; die afwesigheid van Opvoedkundige Assistentdienste in die skool; oorlaaide klasskamers; swak laboratorium fasiliteite en toerusting; ontoereikende boekvoorraad en skryf materiaal; ontoereikende fasiliteite in klas kamers; afwesigheid van 'n Nuusbrief om ouers en die publiek op hoogte te hou van intra- en ekstrakurrikulêre aktiwiteite in die skool; onbetrokkenheid van die skoliere in die bestuur van en besluitneming in die skool beleid; en spanning as gevolg van die laat bekendmaking van matriekuitslae deur die Departement van Opvoeding en Opleiding.

Die bevindinge het verder aan die lig gebring dat baie min in hierdie streek gedoen is om skoliere ondersteuning en hulp te gee t.o.v. skoolopvoeding. Die meerderheid leerlinge het verklaar dat hul skole nie oor die volgende hulpprogramme beskik het nie:

• Paneel vir Identifikasie, Diagnose en Ondersteuning (PIDA); skoolberading; koöperatiewe studie; voorligting oor stres; Departemenshoofde verantwoordelik vir skoolvoorligtingsdienste; teksboeke vir onderwyser en leerlinge oor skoolvoorligting; 'n sisteem van opsieners of studieleiers; en die geleenthed om vryelik oor hul probleme te gesels.

Ten slotte kan gesê word dat die aftakelende stres in sekondêre skole vir Swart kinders in Suid-Afrika slegs aangespreek kan word deur voortdurende toewyding en inspanning op 'n verskeidenheid vlakke, sowel as die heraktivering en die gebruik van aksie-ondersoek oriëntasie. Aanpassings, en nie absolute oplossings nie, behoort die hoogste strewe van opvoeders sowel as ouers te wees.
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CHAPTER ONE

1. THE PROBLEM AND ITS BACKGROUND

1.1 INTRODUCTION

Adolescents today are living in a fast-paced, industrialized, violent and constantly changing world where more demands are being made on them in all the spheres of life. They must, for example, cope with violence, pressures of competitive programmes, the allures of sex and drugs, demands of teachers, parents and peers, abuse without much assistance and greater amounts of information which must be processed in shorter periods of time. The pace of life is so fast that keeping ahead, keeping up or even coping with it, produces stress in them. This state of affairs can be extremely confusing and frustrating to immature youngsters who have not been taught ways and skills of coping with stressful life (Sutherland and Cooper, 1990:1; Elias, 1989:393; Sheridan and Kratochwill, 1992:117; Kruger, 1990:75; Kurten, 1989:3; Du Plooy, 1991:2). Up to 35% of adolescents suffer stress-related physical and emotional health problems at some point, from pulling out their hair to experiencing headaches because of a host of psychological pressures characterizing this era (D'Aurora and Dimian, 1988:44; Omizo and Omizo, 1988:267; O'Brien, 1988:105; Mc Namee and Mc Namee, 1985:81; Kurten, 1989:11).

The subject of stress in children has not received sufficient attention, particularly from the perspective that teachers, parents and other professionals attached to schools can or should be knowledgeable about stress so that they can assist children in developing positive responses (Allen and Green, 1988:3; Schultz and Heuchert, 1983:32; Kruger, 1990:1). Very little if any research has been conducted on stress experienced by adolescents in Black secondary schools. It is therefore significant to determine which factors in these schools cause stress in children and the knowledge thereof will enable school managers, teachers and parents to:

- identify pupils experiencing stress; and
- help them with acquiring coping skills.

1.2 STATEMENT OF THE PROBLEM

Adolescent stress may be defined as the experience by an adolescent of unpleasant emotions, such as tension, frustration, anxiety, anger and depression, resulting from
aspects of his exploration of his world as a child (Kyriacou, 1987:146; Harvey, 1988:16; Van Heerden, 1988:50; Allen and Green, 1988:3). Prolonged adolescence stress results in adolescent burnout which is the syndrome primarily characterized by physical, emotional and attitudinal exhaustion (Cunningham, 1983:39; Pont and Reid, 1985:113; Langblin, 1984:13).

Adolescents are experiencing greater stress in their lives because their teachers and parents are also experiencing higher levels of stress. This is one reason Schultz and Heuchert (1983:33) argue that teacher burnout can:

- cause or exacerbate pupil burnout;
- serve as a vehicle for the teacher to more empathically understand child burnout; and
- serve as a model against which to compare both symptoms and possible alternatives for solving this complex problem on behalf of pupils.

Recent international and national research clearly demonstrates connections between adolescent stress and the school environment, e.g. various researchers agree that public secondary schools have become virtual "hotbeds" of stress for children, namely, pressures arising when they come up against problems such as:

- conflicts and doubts concerning such matters as occupational choice;
- the choice of subjects;
- the fear of not being able to achieve high enough and fast enough to compete with classmates or to please parents; and
- competition in all activities, that is, on the playing field, in the school band, during gymnastics tryouts, and especially in the classroom, without any skills, abilities and experience to cope with competition (Pierce and Molloy, 1990:330; Smit, 1989:294; Register et al., 1991:115; Jackson, 1987:6; Honig, 1986:47; Reed, 1985:82).

Various researchers ascribe the causes of these feelings of stress among high school pupils to the following: Bronfenbrenner (1986:433) blames changes in modern family structure and values; Mackey (1984:15) attributes it to an increase in violence, technological advances, and the inevitability of social change itself. The schools may contribute to children’s stress by separating these young people from adults (Gullota,
1983:154), by separating pupils from one another by age and ability (Calabrese, 1987:936), and by using decision-making structures that are increasingly bureaucratic (Young, 1985:59), impersonal (Heath 1970:523), ineffective, and unfair (Wehlage and Rutter, 1986:387). School stress is a concomitant of forces that push schools to emphasize academic acceleration, evaluation, and test-based accountability (Elkind, 1981:123). A primary causal factor seems to be fear and concern that children will not have a "successful" future, success being defined in terms of college or university education and high-paying professional or technical careers. The paradox is that educators and parents who adopt this viewpoint are gambling with their children's lives, and doing so against the developmental odds (Elias, 1989:403). Children are being subjected to a level of stress that will impede their acquisition of academic skills and leave precious little energy or motivation for developing the competencies needed for citizenship, responsibility, parenthood, and the actual world of work (Zins and Ponti, 1985:49; Shanker, 1988:15; Liebermann, 1988:9; George and Oldaker, 1985:79).

The stress-related problems presented by adolescents in secondary schools reflect their search for alternative outlets, for places to release the pressure, for context in which to feel efficacious. If children are not "good enough" in the academic field, and if schools provide few other outlets and pathways to a feeling of effectiveness and accomplishment, pupils will show that they can be the "best" at disrupting learning, showing disrespect, and resisting entreaties of teachers and parents to do homework. Negative peer subgroups are also available to provide alternative pathways for the spurious self-efficacy of becoming "good" at stealing, smoking, beer drinking, and baiting authority figures (Montague, 1987:20; Strauss et al., 1987:237; Kagan, 1984:103; Hirsch, 1987:18; Goodlad and Oakes, 1988:17; Elias, 1989:403). These are among the developmental realities that cannot be denied.

Fraser (1973:85), a child psychiatrist who observed the effect of the "troubles" on children while working at a Belfast clinic in Northern Ireland, wrote that acute symptoms of stress are experienced by every child who experiences an event that makes unusual demands on his or her physical or emotional resources, for example, riots, violence, explosions, and so on. Symptoms include: sleep disturbance, being tired all the time, separation fears, depression, school refusal, being physically rundown, loss of appetite, bowel/gastric/urinary upsets, dizziness or diarrhoea, frequent colds, headaches, sleeplessness, repeated descriptions of the experience or refusal to talk about it, war games, cranky behaviour, greed and possessiveness, aggression, temper tantrums, withdrawal/sadness/resignation, self-injury and the imagined state of being an adult. If unchecked, these ailments may turn into ulcers, colitis or asthma, or
they may cause loss of sexual interest. Once the pupil is both mentally and physically exhausted, things actually start falling apart at school. The pupil feels guilty, incompetent as a learner and finally inadequate as a person. If unchecked, these burnout symptoms can result in total emotional breakdown (Henderson, 1979:37-39; Schultz and Heuchert, 1983:33). Fraser (1973:86) concludes that these symptoms usually fade quickly unless there has been a lack of support for the child or a lack of opportunity for discussion.

Physical illness is not the only domain where stress wreaks havoc; emotional health and mental functions such as memory, concentration, and creativity are also impaired. Behavioural efficiency, interpersonal relationships, and personal productivity are also limited (Mc Quade and Aikman, 1986:17; Kent, 1987:29; Kline, 1987:43). Because of the physical and psychological demands involved in coping with high levels of life change, it is not surprising that clinicians have suggested that the experiencing of major life changes can have a negative effect on the functioning of the adolescent (Hamilton et al., 1979:17; Karasek et al., 1987:188; Zimring, 1981:159; Baum et al., 1981:27).

Many adolescents have not yet developed efficient coping skills for handling stressful situations, and they have not yet been trained to use their response systems to maximum efficiency (Berndt, 1989:11; Blom et al., 1986:4; Allen and Green, 1988:3). The result is the experiencing of what Selye (1974:26) calls "distress" - damaging or unpleasant stress.

Both teachers and pupils need to learn ways of helping themselves relax to meet stressful school events; they need to learn successful ways of personal problem solving in order to adaptively cope with life in school and in general. Both parties occupy the same life space at the same time, and because of the unique nature of energy transfer from human to human, they pick up and share one another's experiences with stress in life and in school.

If adolescent stress is related to school experience, as a number of studies have indicated, what can educators do to make a difference? Is it possible for schools to alleviate adolescent stress and increase the opportunities for young people to feel the sense of belonging that makes school meaningful for them? No doubt changing a pupil's affective experience is difficult. Yet it is important for all pupils to feel involved in school work and to feel that they can make useful contributions to their school environment. Links between stress and school environment have been
demonstrated, but links between changes in school environment and reduced pupil stress are less clearly established. That will be the purpose of this dissertation.

In a discussion of how schools may reduce adolescence stress and burnout (e.g. Tucker-Ladd, 1990:64; Conners, 1982:19; Register et al., 1991:118; Schultz and Heuchert, 1983:38), the most frequently advocated interventions are:

- promoting more productive peer interactions;
- developing positive teacher-pupil relationships;
- behavioural parent-teacher consultation; and
- providing more meaningful in-school experiences that will increase the pupil's sense of belonging in the school.

These interventions will be explored in CHAPTER THREE.

Following the above international and national literature data and findings on adolescence stress, it is assumed that stress is a major problem of children in Black secondary schools today. The facts that condonations are made from Sub A to Standard 9 with insufficient regard or consideration for pupils' ability (D.E.T. Report, Feb. 1990:6); the use of undifferentiated syllabi for Higher Grade and Lower Grade (D.E.T., Feb. 1990:8); the lack of completion of all the relevant syllabi for Standard 10 subjects in 1989 (D.E.T., Feb. 1990:7); irresponsible actions by the head of department and lack of a control system (D.E.T., Feb. 1990:7); radical pupil leadership in schools (D.E.T., Feb. 1990:13-14); the questionable competence of some Standard 10 teachers (D.E.T., Feb. 1990:11-12); weak facilities, furniture and textbooks (D.E.T., Feb. 1990:9-10); the unavailability of subject advisors (D.E.T., Feb. 1990:12); non-punctuality and absenteeism by teachers (D.E.T., Feb. 1990:12-13); attitude and commitment on the part of teachers (which leaves something to be desired); and disobedience of pupils and political intimidation (D.E.T., Feb. 1990:13), are clear indications of stressful experiences in the lives of Black children.

Questions that now come to mind are:

- What factors cause stress among Black pupils?
- What is the extent of stress among these pupils?
- What effects does stress have on pupils and their schools?
How can schools, particularly schools under the KwaZulu Department of Education and Culture, prevent and combat stress?

In conclusion these questions will highlight the idea that absolute stress management cannot be attained in Black schools at the moment as these schools are part and parcel of the communities that are at present characterized by violence, faction fights, infightings, poverty, insufficient schooling and educational facilities, unavailability of various recreational facilities, unqualified and underqualified teachers, and so on. The society is characterized by a cluster of beliefs, and for this reason and many others this research will look into the possibility of democratically involving parents, teachers and pupils themselves in educational activities that can enable them to transform the distress to which they are subjected into eustress, which according to Selye (1974:83) is a spice of life.

1.3 AIM OF THE STUDY

The aim of this study is to:

- determine factors causing stress in children in Black Secondary Schools in KwaZulu;
- highlight the effects of these stressful experiences on the physical domain, emotional health, mental functions, behavioural efficiency, interpersonal relationships, and personal productivity on the adolescent; and
- give some guidelines to ways of controlling, managing and combating stress in these schools.

This study will concentrate on the democratization of educational school practice through the involvement of parents, teachers and pupils in transforming public Black secondary schools to stress-free educational learning and teaching situations.

1.4 HYPOTHESES

The following general hypotheses will be tested in this research:

- Various factors cause stress among children in Black public secondary schools and are responsible for children's problems which could manifest in physical, mental, emotional, behavioural, interpersonal and personal disturbances symptoms.
Some factors cause more stress than others.

1.5 METHOD OF STUDY

This research consists of a literature study and of empirical research.

1.5.1 Literature study

Current international and national educational journals, papers presented at professional meetings, dissertations by graduate students, and reports by school researchers, university researchers, and governmental agencies which provide information on how far research on stress in children, its effects and management skills has progressed were consulted and serve as primary sources. Books on children's stress serve as secondary sources.

1.5.2 Empirical research

In addition to the literature study, data will be collected by means of a stress-inventory scale. This data will be analyzed and interpreted.

This research will be conducted as follows:

The authorities of the KwaZulu Department of Education and Culture will be requested permission to conduct this research in a sample of secondary schools under their jurisdiction. The researcher will personally visit these schools to conduct the stress-inventory scale research.

1.6 MEASUREMENT INSTRUMENT

A self-developed stress scale will be designed to measure stress among children in Black Secondary Schools in KwaZulu.

1.7 TARGET POPULATION

All children in Black secondary schools in KwaZulu will be considered the target population.
1.8 ACCESSIBLE POPULATION

Since there is a large number of secondary schools in the KwaZulu region, which will take a long period to cover and will have unaffordable financial implications, it was decided to delimit the target population to the secondary school pupils in the Ladysmith area of KwaZulu.

1.9 SAMPLE

A randomly selected sample of N=526 pupils from 10 secondary schools in the Ladysmith area of KwaZulu will be drawn. These pupils will be supplied with questionnaires on stress factors, the effects of stress on both the child and the school, and its management skills.

1.10 STATISTICAL TECHNIQUES

To determine the extent of factors, effects and the management skills of stress in KwaZulu secondary schools, the data obtained from the target population will be analyzed with the help of the SAS Institute programme (1985).

1.11 PROGRAMME OF STUDY

CHAPTER ONE will be primarily an orientation chapter preparing the reader for the subsequent chapters.

Since this research will be conducted with the concept of stress being experienced by the adolescent in the school, it is important, in CHAPTER TWO, to identify those factors within the school that cause unnecessary stress to the pupils. It will also be identified that stressors connected to the psychosomatic-spiritual being of the child are responsible for causing a debilitating condition in his life. The effects of stress on the child's physical domain; emotional health; mental functions such as memory, concentration and creativity; behavioural efficiency; interpersonal relationships and personal achievements will be discussed.

Since it will be seen in CHAPTER TWO that when stress is not properly controlled, it certainly produces a limiting learning capability in the child, it becomes equally important, in CHAPTER THREE, to identify any changes and educational improvements that might need to be made.
In CHAPTER FOUR the empirical research will be motivated. The purpose of the research, method of research, the choice of the target group, the development of the stress-inventory and statistical technique will be discussed.

In CHAPTER FIVE the research results will be statistically analyzed and discussed.

In the concluding chapter, CHAPTER SIX, the summary, implications, conclusions and recommendations will be discussed.

1.12 CONCLUSION

In CHAPTER ONE the statement of the problem, the purpose of research, methods and programme of research have been discussed. In CHAPTER TWO the concept stress, factors causing stress among adolescents in school situations and the effects of stress on both children and schools will be investigated.
CHAPTER TWO

2. **THE NATURE, CAUSES AND EFFECTS OF ADOLESCENT STRESS IN SECONDARY SCHOOLS**

2.1 **INTRODUCTION**

This chapter intends to analyze factors causing schools to be a significant source of stress to children. Debilitating school stress is seen as linked to forces, including some in prominent movements for school "reform", that push schools to overemphasize academic acceleration, competition, evaluation, and test-based accountability. The paradoxical effects of these forces impede acquisition of academic skills and minimize opportunities for children to develop crucial competencies needed for citizenship, responsible adulthood, parenthood, and management of the complex world of work. The effects of stress on the psychosomatic-spiritual life of the adolescent and the school are also presented. The necessity of describing the school as a source of stress and defining stress and the nature of adolescents' stress in schools come to the fore.

2.2 **THE SCHOOL AS A SOURCE OF STRESS**

Schools have the paradoxical role of being both a major source of stress and a major source of stress relief for adolescents. Somehow, schools must balance the stress associated with challenge and motivation with the stress associated with pressure to achieve "success" and avoid "failure". In recent years, this balance has been threatened as schools have been under increasing pressure to place a very strong emphasis on academic achievement. The pressure has been visible in widely published concerns about declining SAT scores and poor performance in matric results (Montague, 1987:19; D.E.T. Report, 1990:15) and in calls to restore literary "classics" as a staple of pupils' reading programs (Hirsch, 1987:57; Elias, 1989:393). Even at early levels of schooling, there is debate about such matters as the extent to which the traditional three R's should be emphasized in kindergarten and preschool (Doremus, 1986:33; Roberts, 1986:34) and testing should be used to make educational decisions concerning young children (Meisels, 1986:92; Register et al., 1991:115).

There is growing concern that well-meaning efforts at academic preparation are excessively stress-inducing and misdirected (Rutter, 1983:3; Bronfenbrenner, 1979:847). Although some children no doubt benefit, others are becoming psychological casualties, as reflected in statistics concerning suicide, substance abuse,

These trends are of particular importance to school psychologists, who may be thought of as the chief caretakers or "guardians" of children's school-based psychosocial functioning and well-being. Alpert (1985:1112), Zins and Ponti (1985:59) and Maher (1984:63) have pointed out that the role of school psychologists, once linked primarily with assessment, is undergoing an inexorable ecological expansion to encompass preventive services and health and mental health promotion efforts at individual pupil, classroom, entire schools, and district levels. This role expansion accompanies an explicit recognition of the undeniable linkage of psychosocial status with human learning and performance (Wynne and Walberg, 1985:17; Hohenshil and Warden, 1978:16). The apparent de-emphasis of important aspects of the school experience, such as developing children's sense of citizenship, responsibility, and selfconfidence, suggests that the effects of debilitating stress, estimated as severely impacting upon up to 35% of our pupils (Forman and O'Malley, 1984:162; Elias, 1989:394; Register et al., 1991:116), will grow.

2.3 WHAT IS STRESS?

There appears to be confusion in psychological literature as to the meaning of the word "stress" (Selye, 1976:14; Gray and Freeman, 1988:4; Berndt, 1989:10; Sutherland and Cooper, 1990:2).

To clarify this confusion, Selye (1967:10) postulates that stress be classified into the following categories when defined:

- a particular stimulus situation, without reference to the reactions of the subject;
- a particular reaction or set of reactions of the individual, without reference to the situation;
- a particular situation and a particular response or group of responses; or
- a state of the individual which brings about a particular set of reactions.
Ursin et al. (1978:16) and Cox (1978:27) indicate that the lack of unanimity among theorists on a specific vantage point from which to define stress has caused a great deal of misunderstanding. In an attempt to avoid this misunderstanding, Levitt (1967:13) is of the opinion that clarity must be obtained for the concepts utilized in the description of stress. Summarizing the points of misunderstanding, Levitt (1967:14) indicates that stress should be conceptualized in the following framework:

- "stress" or a "stressful" situation is one containing stimuli or circumstances calculated to arouse anxiety in the individual;
- "under stress" or "stressed" refers to an individual who is faced by, or is in the midst of a stress situation; and
- a "stress reaction" is an alteration of the individual's condition or performance which comes about presumably as a result of being under stress.

On the basis of Selye's and Levitt's classification and conceptualization of the definitions of stress, various researchers have defined stress as follows:

1. Reed (1985:82) postulates that stress is:
   - the consequence of a dynamic relationship between person and environment:
     "stress involves an interaction of person and environment. Something happens 'out there' which presents a person with a demand, or a constraint, or an opportunity for behaviour" (Mc Grath, 1976:13);
   - the response to something which happens to a person, and which involves ambiguity, paradox or uncertainty:
     "stress is a perceived dynamic state involving uncertainty about something important ... to the individual" (Schuler, 1982:13);
     "stress is the nonspecific response of the body to any demand" (Selye, 1956:14).
ii. Warnick (1981:37) sees stress as a contradiction between needs and values:

"stress is our mental, emotional, physical and behavioural response to anxiety producing events".

iii. Miller and Keane (1978:9) define stress as:

"the sum of all the non-specific biological phenomena elicited by adverse external influences including damage and defense. Stress may be either physical or psychological or both. Just as a bridge is structurally capable of adjusting to certain physical stresses, the human body and mind are normally able to adapt to the stresses of new situations. However, this ability has definite limits beyond which continued stress may cause a breakdown, although this limit varies from person to person ... for example, peptic ulcers may result from prolonged nervous tension in response to real or imagined stresses in people who have a predisposition for ulcers".

iv. In Steadman's Medical Dictionary (1982:12), both a response-based and a stimulus-based approach to the definitions of stress are incorporated. Stress is defined as:

* The resisting force set up in a body as a result of an extremely applied force.

* In psychology, a physical or psychological stimulus which, when impinging upon an individual, produces strain or disequilibrium.

* The reactions of the human body to forces of a deleterious nature, infections, and various abnormal states that tend to disturb its normal physiologic equilibrium.

In the light of the above definitions of stress, adolescent stress can be defined as an experience of unpleasant feelings like tension, frustration, fear, fury and acquired helplessness which results from his daily actualization situations; his response to pressures, responsibilities, and real or imagery threats from the environment; the

Stress is a state that one is in, and this should not be confused with any stimulus that produces such a state which is called a stressor.

2.4 WHAT ARE STRESSORS?

Stressors are acute life events or chronic environmental situations that cause disequilibrium in the individual. This disequilibrium is sufficient to cause the person to make an adjustment to the stressor. This adjustment is called a response. When both a stressor and a response to it occur, stress is present (Roos and Möller, 1988:18; Gerber, 1988:33; Blom et al., 1986:3; Humphrey and Humphrey, 1985:21).

Various researchers have defined stressors as:

- the agents or demands that evoke the patterned response (Cooper, 1983:19);
- events or circumstances which evoke body reaction (Alley, 1980:4);
- demands from the environment which are experienced as threats and which cause discomfort (Roos and Möller, 1988:18);
- situations which are potentially or realistically detrimental, unpleasant or overdemanding (Gerber, 1988:33); and

Stressors are not exclusively physical by nature. Emotions, for example, love, hate, joy, anger, challenge, and fear, as well as thoughts, also call forth the changes characteristic of the stress syndrome (Cooper, 1983:10; Sutherland and Cooper, 1990:21; Gray and Freeman, 1988:4). In fact, psychological arousal is one of the most frequent activators of stress.

Thus, a school stressor is any situation and/or life event connected with the school that produces stress (Schultz and Heuchert, 1983:17; Kurten, 1989:13; Du Plooy, 1991:28).
Investigations of the school setting have shown a relationship between stress and child's perceptions of the bureaucratic and decision-making aspects of schools (Newland, 1987:419), feelings of pressure in school (MacQuigg, 1986:168), participation in extracurricular activities, making school acceptable, and perceptions of teachers' understanding of pupils (Raymond, 1984:44). In assessing the nature of school stress to the pupils, Schultz and Heuchert (1983:52) recognized that the sources of stress in schools may include the community, an uncaring school, the teacher, administrator, ineffective management strategies, poor instruction, impersonal curriculum, medical impairments, and pupil and teacher emotional problem; in short, all aspects of the pupil's life.

To explore the connections between the school environment and adolescent stress, Tucker-Ladd (1990:112) conducted a case study combining both quantitative and qualitative research methods in an American midwestern high school using Mackey's Adolescent Stress Scale (Mackey and Ahlgren, 1977:230) to measure stress in the school's population and the Effective School Battery Student Survey (Gottfredson, 1984:3) to measure pupil perceptions of school climate and found significant relationships between adolescent stress and various aspects of the climate in these children's school. He also found many differences between the more stressed pupils and those who were less so. Specifically, it showed that more stressed pupils:

- were involved in unsafe activities with their peers, either as victims or aggressors;
- felt teachers and other pupils did not respect them because they were not good pupils or were not members of status groups in the school (such as teacher's pets, athletes, well dressed pupils, or those whose parents had influence;
- saw the school as unchanging, felt powerless to make changes they wanted, were hostile toward the pupil council, and were unfamiliar with and uninvolved in existing change mechanisms in the schools; and
- disliked many school rules and felt that teachers judged and treated them more harshly than certain other pupils when rules were enforced.

Interviewing pupils considered to be victims of extreme stress in school so that they could get a sense of their experiences, Schultz and Heuchert (1983:37-38) found the following three major reactions to children's stress in schools:
situations wherein the child experiences stress but passively remains a part of the school setting (or institutionalization); situations wherein the child experiences stress in school and leaves the setting (or flight); and situations wherein the child stays in school but his or her behaviour is more reactive in nature (or fight).

They observed that there are some children who go through all three stages (institutionalization, flight and fight). They may first believe that all of the problem is in them and they accept it. Then, they may try to change by trying to do the right thing, please the teachers and parents, only to find that they still are having serious problems in school. They may then give up, rebel, stop caring, and start lashing out at everyone, sometimes in an indiscriminate manner.

Schultz and Heuchert further noted the following reactions of adolescents to stress in schools:

- stealing, breaking school equipment, lying, cheating, deliberately getting into trouble to get sent out of class, giving up on oneself, learning to live as a failure, excessive alcohol consumption, breaking and entering, overeating, institutionalization for mental problems, skipping school, elective mutism, explosive behaviour toward peers, faking illness, deliberately doing subpar work, sleeping in class as an escape, contemplating suicide, threatening pregnancy, having low self-esteem, depression, using people to make oneself feel important, and burning and torturing animals.

2.6 **THE CAUSES OF ADOLESCENT STRESS IN SCHOOLS**

Considerable research has been carried out on sources of stress and as a result of Robert Pearce's study in 1978, three levels of stress causes were identified which will be considered in the light of this research on adolescent stress in schools. In alignment with Pearce's (1978:43) postulation, the three levels of stress in schools will be distinguished as follows:

- child oriented stress, for example, fear of failing the tests or examinations;
- interpersonally oriented stress, like the feeling of being unappreciated or misunderstood; ineffective performance by teachers and so on; and
school oriented stress, like an over-competitive atmosphere; unclear work recognition; lack of recognition; inadequate credit.

2.6.1 Child oriented stress factors

2.6.1.1 Feelings of inferiority

An inferiority complex in the adolescent can be defined as his "strong and persistent tension arising from a somewhat morbid emotional attitude toward his felt deficiency in his personal equipment" (Hobson, 1990:115; Joravsky, 1989:39; Milner, 1983:147). This refers to an attitude which an adolescent may have about feeling less capable than others. Closely allied to inferiority, is the feeling or conviction of inadequacy. Inferiority, whether conscious or unconscious, implies unfavourable comparison with others, inadequacy suggests personal inability to meet the demands of the situation. These inferiority feelings are the result of too many failure experiences and frustrations; they are learned or developmental reactions that, if not corrected early, may eventually lead to the growth of deeply rooted attitudes of inferiority. Attitudes of this sort can dominate and condition the child to the point where he or she is left with a general feeling of not being able to do anything very well (Brownell, 1982:825; Stein, 1987:79; Wallace and Mc Loughlin, 1988:21; Wang et al., 1990:163; Ames, 1983:18).

The following physical factors or organic causes may cause an inferiority complex in the adolescent:

- tall and skinny boys or girls (ectomorphs) or;
- short and fat (endomorphs);
- overweight or obese;
- underweight;
- adolescents with too fat ankles, hips, or thighs;
- protruding buttocks or stomach;
- too long nose or pointed, wide, or pug nose;
- pointed, sunken, or double chin;
bulgy, sunken, too big, the wrong shape, or crossed eyes;
crooked, decayed, or missing teeth;
homely, scarred, pimply, or mole spotted face which tend to worry the children and make them unhappy with themselves and are viewed more negatively (Bozzi, 1985:20; Rierdan and Koff, 1980:341; Collins and La Ganza, 1982:324; Steele, 1980:826; Shestowsky, 1983:551; Stein, 1987:79; Brownell, 1982:830; Males et al., 1982:840), and
adolescent girls in Standard six become conscious of particular signs of maturation, such as breast development (Rierdan and Koff, 1980:341; Shestowsky, 1983:569).

2.6.1.2 Neurological impairments

Neurotically stressed adolescents tend to avoid stimulating, active and unusual situations more than stable and non-stressed adolescents (Furnham, 1981:61). In an intimate, interpersonal situation, neurotic adolescents reduce the level of intimacy by gaze avoidance. In school, neurotics and neurotic-introverts, because of their high emotionality, are likely to perform poorer (Kline, 1983:28). Cooper and Payne (1967:46) found that neuroticism is related to poor work adjustment and frequency of non-permitted absence in routine, monotonous work. Neurotic introverted adolescents are associated with phobias, anxiety states and neurotic depression (i.e., dysthymia) (Eysenck, 1967:48). Neurotic extroverted adolescents are most susceptible to hysteria (Sutherland and Cooper, 1990:74). Some adolescents have been born with temperamental and neurological vulnerabilities that impair their ability to think about and deal adaptively with even small stressors in their lives (Honig, 1986:52).

Recent findings suggest that the neurological status of a distressed child is different from that of normal pupils (Gaddes, 1985:10). The major distinction has been based on "soft" neurological signs, that is, signs with uncertain or general diagnostic value. The concept of minimal brain dysfunction (MBD) is used to explain the idea that learning stress involving poor memory, association of various types of symbols, and so on may result from a non-specific problem in the nervous system. Characteristics such as impulsivity, inattention, hyperactivity, and poor coordination are often included in this concept (Wallace and McLoughlin, 1988:26).

Dyslexia is a neurologically based descriptor of learning distress in reading (Geschwind, 1982:13). A pupil's difficulties in discriminating, remembering, and
associating visual and auditory symbols are related to brain areas and the functioning of the central and peripheral nervous systems. The visual - motor aspects of following a line of print and reproducing letters accurately on paper are also problems of neuroses (Mc Quade and Aikman, 1986:80).

Visual, auditory, and motor perceptions, with visual and auditory including the recognitions, discrimination, sequencing, recall, and association of information from the respective senses that is transmitted neurologically, are psychological concepts based on hypothetical models of neurological functioning. Thus, a learning distressed pupil's reading difficulties might be attributed to confused orientation of, for example, the letters b and d. Motor problems (e.g. in directionality, balance, or coordination) are considered signs of poor or delayed development of essential underpinnings for later academic learning. The copying, handwriting, and reading difficulties of some learning distressed adolescents are attributed to poor coordination of visual and motor activities. Subtle tactile and kinesthetic (that is, motor/body sense) imperceptions are also involved in this respect (Wang et al., 1990:161; Kephart, 1971:49; Wallace and Mc Loughlin, 1988:28).

The fact that most children with learning distress tend to be males and the maturation of the male neurological system is considered slower than that of the female explains the fact that some of the skills of boys develop without suitable coordination with other skills, and the result is both delayed and confused learning of academic skills (Ames, 1983:20; Reid and Hresko, 1981:3).

2.6.1.3 Language disorders

The difficulty learning distressed pupils have in acquiring and using verbal symbols in communication is termed aphasia. Pupils with learning stress in this respect may be said to have unique problems with one or more of the dimensions of language: vocabulary (the meaning of words), grammar (the order of language), phonology (the sounds of language) or pragmatics (the intent of communication). Current research indicates that learning distressed adolescents are distinctive in their development of skills in these areas (Wiig and Semel, 1984:39; Wallace and Mc Loughlin, 1988:31).

Adolescents with language stress may at times prove not to be severely language disordered but have more subtle difficulties that complicate their academic progress, for example, difficulty in accurately reading words aloud may be associated with an underlying problem in discriminating the sounds involved. In another case sparse written productivity may be related to poor oral vocabulary or a confused sense of the

2.6.1.4 Physical illness

Physical illnesses an adolescent may suffer can be classified into:

- skin reaction: some types of eczema, acne, hives;
- musculoskeletal reactions: backache, arthritis, rheumatism (due to functional causes);
- respiratory reactions: asthma, hay fever, bronchitis;
- cardiovascular reactions: high blood pressure, migraine headaches, palpitation of the heart;
- blood and lymphatic reactions;
- gastrointestinal reactions: ulcers, colitis, constipation, hyperactivity;
- genitourinary reactions: menstrual disturbances, painful urination, vaginal contractions;
- endocrine reactions: glandular disturbance, obesity, hyperthyroidism;
- nervous system reactions: anxiety, fatigue, convulsions; and

2.6.1.5 Developmental factors

Adolescence is a period of sexual maturation and physical growth. This period is both traumatic and worrying to both boys and girls. For example, beginning menstruation can be a traumatic event for some girls who are not prepared ahead of time (Pillemer et al., 1987:188). Adolescent boys wonder and worry about nocturnal emissions, or so-called wet dreams (Rice, 1990:125). Many pupils in distress are described behaviourally younger than their chronological ages in terms of motor, verbal, social and other development. Besides developing slowly, some of the skills of these children
develop without suitable coordination with other skills, and the result is both delayed and confused learning of academic skills (Ames, 1983:20; Wallace and Mc Loughlin, 1988:25).

Piagetian concepts are frequently used to better delineate the developmental nature of pupils in distress (Reid and Hresco, 1981:147; Wallace and Mc Loughlin, 1988:29). The tendency of some distressed pupils to have problems with perceptual tasks and particular problems with symbolic tasks suggests inappropriate movement through the stages of learning. These pupils' poor internal organization of information and inadequate response to task completion are described as poorly developed internal schemata, or outlines, of external information and an inability to modify such outlines when new information presents itself (Moos, 1984:7; Maccoby, 1983:220; Baker, 1982:13).

Many adolescents in distress display maturational lag to such an extent that they are considered too young for the academic rigours of school (Ames, 1983:19). It is boys who most of the time have this problem because of the fact that the maturation of their neurological system is slower than that of females.

2.6.1.6 Limited cognitive potential

Adolescents under stress have the following cognitive problems:

i. Inattention

They often fail to finish things they start; often don't seem to listen; are easily distracted; have difficulty concentrating on school work or other tasks requiring sustained attention; have difficulty sticking to a play activity (Whalen, 1983:151; Van Niekerk, 1987:27).

ii. Impulsivity

They often act before thinking; shift excessively from one activity to another; have difficulty concentrating on school work or other tasks requiring sustained attention; need a lot of supervision; frequently call out in class; have difficulty awaiting turns in games or group situations (Meichenbaum, 1983:15; Zins and Ponti, 1985:57).
iii. **Hyperactivity**

They run about or climb on things; have difficulty sitting still or fidget excessively; have difficulty staying seated; move about excessively during sleep; are always "on the go" or act as if "driven by a motor" (Whalen, 1983:151; Wynne and Walberg, 1985:16).

iv. **Poor memory**

Researchers studied the memory processes of learning in children under stress (Tarver *et al*., 1976:380; Forgesen and Goldman, 1977:33; Hallahan *et al*., 1985:79) and their findings have been remarkably consistent in three major conclusions:

- in comparison to their non-stressed peers, distressed children exhibit difficulties on memory tasks;
- the memory problems of distressed pupils can be attributed to a failure to use certain strategies that non-stressed children are accustomed to using; and
- the strategies that non-stressed pupils use spontaneously can be taught to distressed children. When taught how to use such strategies, distressed pupils perform on a par with their non-stressed peers.

v. **Attribution**

Researchers indicate that distressed pupils differ from non-stressed pupils in their beliefs about the causes of their own behaviour. Hallahan *et al*. (1978:232); Pearl (1982:175) and Pearl *et al*. (1980:8) all found that distressed pupils were more likely than non-stressed pupils to attribute their successes to external factors. Many such pupils avoid personal responsibility for their successes and failures and develop an attitude of helplessness (Seligman, 1975:49), believing that there is little they can do to increase their chances for success (Wallace and Kauffman, 1986:39).

In summarizing the research in this area, Bryan and Bryan (1986:203) conclude that pupils in distress, at all ages, are:

- unlikely to take pride in their successes;
- particularly prone to minimize whatever successes they achieve;
• not so reluctant to minimize their responsibilities for failure; and

• apparently more pessimistic than non-stressed peers regarding future success.

vi. Metacognition

A number of investigations indicate that some pupils in distress experience metacognitive problems in their learning. Research indicates that pupils in distress have deficits in metacognition (Kotsonis and Patterson, 1980:542), metamemory (Forgesen, 1986:406), and metacommencement (Wong, 1982:49). Adolescents in learning distress and non-stressed pupils in the Forgesen study, for example, were asked questions about how they remember information, and significant differences were obtained on items requiring the pupils to produce a variety of solutions for memory problems. The author concluded that pupils with learning distress may have difficulty in the area of metamemory.

According to Hallahan et al. (1985:209), much of the research suggests that pupils with learning distress are deficient in the following metacognition strategies:

• clarifying the purposes of reading;
• focusing attention on important parts of passages;
• monitoring their levels of comprehension;
• re-reading and scanning ahead; and
• consulting external sources, such as a dictionary.

2.6.1.7 Emotional immaturity and instability

Adolescents' emotional disorders are characterized by:

i. Depression

Depression is characterized by feelings of sadness, despair, melancholia, listlessness, and a reduction of mental activity and physical drive (Stehouwer et al., 1985:291). Emery (1983:251) describes the following different syndromes of depression in adolescents:
Acute depression, where adolescents may complain of boredom and social isolation and actually spend less time in interacting with peers, siblings, and parents. They may cry easily and daydream a lot (Siegel and Griffin, 1983:970). The episode usually lasts a fairly short time. It may be brought on by physical illness or problems, trouble with the law, trouble at school or with drugs, loss of intimate relationships, or inadequate family and school relationships (Apter and Tyano, 1988:190).

Chronic depression is more severe. The adolescent usually experiences repeated rejection, severe emotional trauma, or a loss of love, either of a family member or a friend. Her or she is weary of the world and often not able to perform ordinary tasks. The depressed mood may be evident for years and be accompanied by psychotic features and melancholia (loss of pleasure in almost everything) (Good and Weinstein, 1986:1093; Francescani, 1982:217; Gardner, 1987:3; Clabby and Elias, 1986:7; Brophy, 1985:234).

Masked depression is difficult to recognize. The adolescent is depressed but in an effort to escape or deny depression may become overactive and engage in various types of acting-out behaviour. Sexual promiscuity, especially in females, is often a disguised attempt to avoid feelings of depression and loneliness. Other adolescents abuse drugs or are in trouble with the law. Restlessness and anger are frequently present (Maag et al., 1988:80; Strauss et al., 1987:237; Shanker, 1988:4).

ii. Anxiety disorders

Adolescents suffering from anxiety disorders tend to make an enormous catastrophe out of the smallest mishap and believe that the perceived catastrophe exists. Such internal anxiety may be accompanied be feelings of inferiority, sleep disturbances, nervousness, somatic complaints such as respiratory or digestive disturbances, dizziness, or an increase in psychomotor activity to try to escape or cover up the fear. It may also manifest itself in behaviour disturbances (Lightfoot, 1987:204; Montague, 1987:20; Oja and Ham, 1984:189, Rogers and Stevenson, 1988:73).
iii. Phobic disorders

A phobia is an excessive, uncontrolled fear that usually develops during adulthood through exposure to severe, traumatic episodes that children subsequently repress in memory. A phobia may develop out of reaction to fear or guilt (Baird et al., 1986:451; Elkind, 1986:38; Gmelch, 1983:12). The episode passes, but the phobia remains. The Diagnostic and Statistical Manual of Mental Disorders III-R (American Psychiatric Association, 1987:13) divides phobias into the following three categories:

- Simple phobias, or anxiety states, which include mysophobia (fear of dirt or contamination) which may result in excessive cleanliness or constant and repeated washing. It may have originated because of fear and guilt.

- Social phobias are characterized by extreme fears of social interactions, particularly those with strangers and those where the adolescent might be evaluated negatively such as on a school interview or a first date. Because this kind of phobia limits social interaction, it disrupts the adolescent's life. One such fear is homilophobia, which is fear that the adolescent has that other people may find something wrong with his or her appearance, attire, or demeanour.

- Agoraphobia is the most handicapping of all phobias, and it literally means "fear of open spaces" and involves an intense fear of leaving his or her home or other familiar places. In extreme cases, the adolescent is bound to his or her home, never daring to leave. In other cases, the adolescent will leave home but refuses to venture to selected public places, like the school.

iv. Disorders of impulse control

These take the following forms:

- kleptomania which is the urge to steal;

- pyromania which is the urge to set fires. Not all adolescents who set fires are pyromaniacs. Some do it out of boredom and the need for excitement. Setting empty buildings on fire in these instances becomes a mean of generating excitement. True pyromaniacs act compulsively,
and sometimes impulsively, out of neurotic need (Bartholomew, 1987:83; Wooden, 1985:26).

v. Somatoform disorders

Adolescents here experience symptoms of physical health problems that have psychological rather than physical causes. One such disorder is conversion disorder, in which anxiety or upset becomes so severe that it results in physical symptoms such as temporary blindness or paralysis. The illness is usually the result of one or more emotionally charged life situations with which the adolescent finds difficulty coping. The unconscious conflict produces malfunctioning of one of the special sense or of the voluntary nervous system, such as temporary blindness or paralysis (Choquet and Menke, 1987:301; Brouwers, 1988:426; Altmann et al., 1988:29).

vi. Schizophrenic disorders

Schizophrenia is an extreme, psychotic withdrawal characterized by hallucinations and delusions. Schizophrenic adolescents withdraw by isolating themselves from social groups or through alcohol, drugs or sleep. They withdraw by dropping out of school, or they seek to escape through athletics, an overactive social life, staying away from home, or promiscuous sex. Becoming preoccupied with school work to the exclusion of any close friendships or leisure-time activities is a form of escape (Gottesman and Schields, 1982:207; Goldstein, 1981:385; Grinker and Holzman, 1973:169; Rice, 1990:251).

2.6.1.8 Poor self-concept and self-esteem

Psychological maladjustment occurs when there is a divergence between the selves the adolescents are being in relationships to others and the selves they perceive that they are or want to be, which may influence the following:

i. Mental Health

Adolescents whose identities are weak or whose self-esteem has never sufficiently developed evidence psychosomatic disorder of anxiety (Brennan and O'Loidaean, 1980:14; Koenig, 1988:117)). Low self-esteem has also been found to be a factor in drug abuse (Reardon and Griffing, 1983:40) and in unwed pregnancy (Black and de Blassie, 1985:280; Blinn, 1987:256; Horn
and Rudolph, 1987:596; Pattern, 1981:777). In fact, unwed pregnancy is often an effort on the part of adolescent women to enhance their self-esteem (Streetman, 1987:464). The adolescent whose identity and self-esteem are weak sometimes develops a false front or facade with which to face the world (Elliot, 1982:135). The facade is a compensating mechanism, its aim is to overcome the feeling of worthlessness by convincing others that he is worthy: "he tries to put on an act to impress people" (Maccoby, 1983:231; Sternberg and Martin, 1988:271; Rice, 1990:223). But putting on an act is a strain. To act confident, friendly, and cheerful when the adolescent feels the opposite is a constant struggle.

Adolescents with low self-esteem are overly vulnerable to criticism, rejection, or any other evidence in their daily lives that testifies to their inadequacy, incompetence, or worthlessness. They may be deeply disturbed when laughed at, scolded, blamed, or when others have a poor opinion of them. The more vulnerable they feel themselves to be, the higher are their anxiety levels. Such adolescents report: "Criticism hurts me terribly" or "I can't stand to have anyone laugh at me or blame me when something goes wrong". As a result they feel awkward and uneasy in social situations and avoid embarrassment whenever they can (Meisels, 1986:91; Rutter, 1983:5; Elias and Ciabby, 1989:34; Gardner, 1987:19).

### ii. Interpersonal incompetence and social maladjustments

Adolescents with poor self concepts are often rejected by other people. There is a close relationship between self-acceptance and social adjustment. One of the signs of possible disturbance during adolescence is an inability to establish friendships or to meet new people (Wayson, 1985:229; Sarason, 1982:134; Kagan, 1984:33). Adolescents with low self-esteem tend to be outstanding in their social invisibility. They are not noticed or selected as leaders, and they do not participate as often in class, club, or social activities. They do not stand up for their own rights or express their opinions on matters that concern them. These adolescents are more often afflicted with pangs of loneliness. Shy adolescents often feel awkward and tense in social situations, which makes it more difficult for them to communicate with others (Ishiyama, 1984:907). Because they want to be liked, they are more easily influenced and led and usually let others make decisions because they lack the necessary self-confidence. Those who submit unwillingly to others are less likely to like
them and to have faith in them (Kurten, 1989:15; Elias et al., 1985:116; Eisner, 1988:27; Doremus, 1986:34).

iii. Poor progress in school

There is a correlation between poor self-concept and poor achievement in school (Bell and Ward, 1980:901; Moos, 1984:33; Alpert, 1985:1120; Duke and Jones, 1985:273). Studies of school dropouts show that low aspirations, accomplishment and self-esteem are already present or predictable by the start of the tenth grade. One reason for the high dropout rate is that pupils who have negative attitudes about themselves impose limitations on their own achievement. They feel they "can't do it anyhow" or are "not smart enough" (Elias, 1989:403; Elkind, 1986:38; George and Oldaker, 1985:81). This relationship between negative self-concept and school achievement begins early. Unfavourable views of self that an adolescent has, may have already been established before children enter first grade. These children might have started out in school with a feeling they are not going to do well, and as a result, they do not (Roberts, 1986:34; Strauss et al., 1987:237; Shure and Spivack, 1978:147).

iv. Low vocational aspirations

The desire and expectation to get ahead vocationally also depend on self-esteem. Boys who aspire to upward mobility also show a strong sense of self-esteem, whereas downwardly mobile boys more often wish for changes in self that are so extensive that they indicate self-rejection. Both those with low and high self-esteem consider it important to get ahead, but those with low self-esteem are less likely to expect they will succeed. They are more likely to say: "I would like to get ahead in life, but I don't think I will ever get ahead as fast as I would like". They less often think they possess those qualities essential for success. Boys and girls with low self-esteem want to avoid both positions in which they will be forced to exercise leadership and activities in which others dominate them; they want to be neither power wielders nor power-subjects. Avoiding leadership or supervision by others is a way of avoiding criticism or judgements (Rogers and Stevenson, 1988:69; Lieberman, 1988:7; Lieberman and Miller, 1984:18; Horton, 1988:11; Horowitz, 1988:45; Hirsch, 1987:103).
v. Delinquency

Delinquent adolescents tend to show lower self-esteem than do nondelinquent adolescents (Lund and Salary, 1980:69; Gardner, 1987:157; Ciaranello, 1983:89; Forman and O'Malley, 1984:170). Their delinquency may be overcompensation for their inadequate self-concepts (Bynner et al., 1981:429; Horowitz, 1988:46; Elias, 1989:404). One theory is that they have low self-esteem and so adopt deviant patterns of behaviour to reduce self-rejecting feelings. In other words, if their behaviour begins to match their low opinions of themselves, they decrease their own self-derogation and rejection (Kaplan, 1978:270; Price and Smith, 1985:39; Good and Weinstein, 1986:1095). They seek to restore their self-respect by aligning themselves with deviant groups that accord them the approval denied by the rest of society (Rosenberg and Rosenberg, 1978:289; Sylwester, 1983:4; Sternberg and Martin, 1988:259; Elkind, 1986:38). Thus, an adequate self-concept protects the adolescent from delinquency; those who see themselves as "good people" or "nondelinquents" have developed an inner containment against becoming delinquent (Lightfoot, 1987:203; D'Zurilla, 1986:149; Commins, 1986:125; Beyer, 1988:88).

2.6.1.9 Type A Behaviour (TAB) children

Adolescents with Type A behaviour tend to be aggressive, ambitious, competitive, impatient, struggling for recognition, over-anxious about keeping time schedules and put pressure on themselves in getting things done (Friedman and Rosenman, 1974:37). They work too hard when no deadline or time limit has been set. By contrast these characteristics are not found in Type B adolescents who are more easy going, relaxed, and tend not to put pressure on themselves, and they are unlikely to develop heart disease, while Type A behaviour adolescents are likely to develop heart disease as a result of stress. Stress authorities are studying the possibility that the condition of Type A behaviour in adults could possibly have its origin in childhood (Humphrey and Humphrey, 1985:13; Sutherland and Cooper, 1990:13).

Glass et al. (1974:39) have estimated that as many as 40% of the population falls into the Type A category, and this percentage includes children as young as 10 or 11 years of age. Research show that Type A parents tend to drive their children to achieve and excel in school. In fact, some researchers have suggested that much of the socialization in modern American society fosters Type A behaviour in children. This
can be harmful, even counter productive if the child comes under too much stress (Mc Quade and Aikman, 1986:155; Miller and Swain, 1987:93; Melhuish, 1987:23).

2.6.2 Interpersonally oriented stress

Selye (1974:29) suggests that having to live with other people is one of the most stressful aspects of life. Good relationships between adolescents, parents and teachers at school are considered a central factor in the child - parent - teacher and school health (Kahn et al., 1964:39; French and Caplan, 1973:109). Poor relationships in school are defined as its having "low trust, low levels of supportiveness and low interest in problem solving within the school". Mistrust is positively related to high role ambiguity, which leads to inadequate interpersonal communications between children, parents and teachers; and psychological strain in the form of low-learning satisfaction, decreased well-being and feelings of being threatened on the part of children (Blom et al., 1986:128; Pearlin et al., 1981:343; Paykel, 1982:49; Llorente, 1986:428).

Buck (1972:98) and Mc Lean (1979:139) assert that inconsiderate behaviour on the part of the teacher in school appear to contribute significantly to the child's feelings of learning pressure in the school, and close supervision and rigid performance monitoring can also be stressful. In addition, when the learning and teaching load and learning pressure are perceived to be higher, the relationship between the teacher and the child suffers (Smith, 1981:392; Smith et al., 1984:227; Larsen, 1985:309; Matteson and Ivancevich, 1987:27).

Quick and Quick (1984:93) postulate that the interpersonal demands and the social pressures which arise from social system relationships in the school may be potential sources of stress for both the child and the teacher. These interpersonal pressures can be caused by:

i. Teachers' leadership style

Teachers' leadership style could be a potential source of stress for adolescents in schools. Lewin et al. (1939:14) document the effects of exposure to an authoritarian style of teacher. They assert that these teachers are less likely to engage in a participative form of leadership or appreciate that feedback on performance and recognition for effort are also beneficial to the teacher - pupil relationship. Reactions to an authoritarian style of the teacher varies; tensions may be expressed by outward calm, passive, repressive attitudes, which will manifest physiologically as elevated blood pressure, or there might be an overt

ii. Social density

Research evidence suggests that there is an association between crowding and psychological stress, which leads to an increase in both contagious and non-contagious illness (Cox et al., 1982:63; Evans, 1979:126). Where children do not have adequate learning space, their performance suffers, increased tension is observed and dissatisfaction is reported (Ward and Eisler, 1987:320; Wethington and Kessler, 1986:83; Williams et al., 1985:19).

Although the concept of burnout (i.e., the stress associated with a high degree of contact with others) is normally applied to professional occupations, there is also a need to understand burnout in terms of children in the school (Schultz and Heuchert, 1983:32). Hartman and Pearlman (1982:78) define three components of being burned out:

- emotional and/or physical exhaustion;
- inefficiency in learning; and
- over depersonalization.

Behavioural response includes increased absenteeism and drug abuse.

iii. Group pressure

Both formal, e.g. study groups and informal (peers) groups in the school put considerable pressure on the adolescent to conform to group norms, which may concern study skills and pace, status and style of relationships, and so on (Marsch, 1984:1297; Roberts, 1982:390). Quick (1984:59) asserts that a stressor situation develops if the values, beliefs and behaviour of the adolescent are suppressed and Laing (1971:103) suggests that these interpersonal group pressures cause various psychological and behavioural disorders.

2.6.3 School oriented stress

Coldicott (1985:91) found evidence that stress in modern schools poses a serious threat to the mental and physical well-being of children. The following factors contribute to debilitating adolescent stress in secondary schools:
2.6.3.1 School structure and climate

This category of stress can be described in terms of the child being in the school and the threat to his or her freedom, autonomy and identity that this imposes. Four factors create good spirit in the school, namely, autonomy, structure, reward and consideration. Thus, a school has a personality to the extent that these factors may be seen as the way in which the school treats its children and staff. How children perceive the culture, customs and climate of the school are important in the understanding of potential sources of stress resulting from being in the school. Satisfaction or dissatisfaction are ultimately related to the perception and evaluation of structure and climate of the school. Stress factors identified within this category mainly focus on the involvement or participation on the part of the adolescents, teachers and parents in the school's activities (Conners, 1982:18; Beach, 1991:313; Diamond, 1991:232; Thoresen and Eagleton, 1987:49; Jackson, 1987:6; Cooper and Marshall, 1978:54; Landy and Trumbo, 1980:193).

Lack of participation in the decision-making process, lack of effective consultation and communication, unjustified restrictions on behaviour, school politics and no sense of belonging are identified as potential stressors for adolescents in secondary schools (Blom et al., 1986:119; Wolff, 1981:87; Cottle, 1980:39; Horowitz, 1988:46). Lack of participation in school activity is associated with negative psychological mood and behavioural responses, including escapist drinking and heavy smoking (Caplan et al., 1975:213; Melhuish, 1987:149; Kobasa, 1979:10; Innes, 1981:64; Harvey et al., 1988:8; Hawkins et al., 1983:18). Restriction of opportunity for participation and autonomy results in increased depression, exhaustion, illness rates and pill consumption (Sutherland and Cooper, 1990:55; De Frank and Cooper, 1987:7; Dembroski et al., 1985:221). A poor school climate, insecurity in the school and the relationship with the school are all significant predictors of low mental well-being among adolescents in the school (Cooper and Melhuish, 1980:592; Combs, 1981:448; Tobias, 1980:27).

Lawrence et al. (1989:153) and Schultz and Heuchert (1983:19-20) list the following factors as characterizing a stressful school:

- a large number of totally "untreated" cases of maladjusted children. Their difficulties are unrecognized, and are apparent in a situation in which they received virtually no counselling;

- an unstructured environment which is subject to random irregularities of programme. Teachers and pupils are not where you expect them to be at
certain times. Senior school management is deficient. Communications is haphazard;

- a number of staff members who are "bad" for all children but especially for children under stress. A number of unmotivated and uninterested teachers; neurotic or otherwise disturbed staff members and prejudiced teachers. Teachers with weak personalities, with abnormally low professional standards (e.g. who fail to arrive for teaching, fail through negligence or deliberate intent to carry out instructions or to support the details of the school's policy, are absorbed in themselves, neglecting their teaching functions);

- supportive services, like medical and social welfare, are not used where teachers have failed;

- an absence of home-school liaison (which is partly related to (iv) above). Few parents enter the school;

- faulty curricula. Lack of choice of subjects;

- inadequate remedial assistance particularly with reading;

- generally poor morale. A feeling among the children that teachers are no longer to be trusted, because they have left promises unfulfilled so often: they say that good things will happen, and they don't; they arouse enthusiasms and then let them peter out; they promise organization and then let chaos happen. When this occurs often enough in a school, mistrust grows in children, and anxiety and misery prevail. This is a school climate in which disruptive behaviour breeds. The lack of a clearly defined and executed policy is part of the general climate, so it does not matter immediately to the children whether it occurs through the negligence or deliberate intent referred to above. Thus it is that teachers who flout agreed school policy for whatever reasons, contribute to a climate of malaise in the school in which they work;

- erratically and irrationally applied sanctions, e.g. children penalized for coming to school late when they were simply helping a sick parent;

- high turnover of staff, leading to lack of learning and general insecurity. The appointment of staff whose English could not be understood (in English medium schools), causing immense frustration at least in initial contact;
lack of good teaching and wastage of potential. Classes out of the teachers' control because of overcrowdedness, outdated or old-fashioned teaching methods and impractical subject matter of the teacher; and

pupils having to tolerate all the noise, and lack of privacy that is part of being in school; being scared to break a rule; being not able to rest when feeling the need to do so; having to remember and being able to apply all the rules; have their low grade called out; the child's being in the lowest reading group, and knowing that the other children think he is slow and not as able as others; the child having to get up in front of the whole class, and making an oral presentation for the first time; the child being told by his teacher that he is dumb because he cannot remember the spelling word; his going to a new school and making new friends; going out to recess and being the last one picked to play kickball; feeling that no one really cares about him; feeling sad and lonely and not being able to share these feelings with anyone; feeling afraid to say anything in class; having to sit so long at his desk without a break that his mind and body become numb or restless; telling himself that he is dumb, and that he cannot do anything right; being shamed in front of his peers; and someone suggesting a spelling "bee" and being the worst speller in class.

2.6.3.2 Test anxiety

Test anxiety has been identified as a prevalent and debilitating condition in schools. Researchers have estimated that 10 million pupils at precollege levels experience test anxiety (Dendato and Diener, 1986:131; Hill and Wigfield, 1984:105; Horn and Dollinger, 1989:373). The primary detrimental consequence of test anxiety is that it decreases performance and leads to consistent misinterpretation of the intelligence, aptitude, and progress of test-anxious pupils (Register et al., 1991:115; Rosa et al., 1983:158; Starker, 1985:241).

Deffenbacher and Hazaleus (1985:170) have outlined three sources of interference in test anxiety:

- Worry, which refers to negative cognitions regarding a child's performance. For example, worry might involve the child's evaluating of his ability relative to the ability of other children (for example, "John is smarter than I am and will always do better"). Studies suggest that highly test-anxious pupils report a greater number and higher frequency of negative self-statements (Bruch,

- Emotionality refers to self-perceived autonomic arousal, for example, muscle tension, sweaty palms, and increased heart rate. Studies suggest that the attention given to physiological arousal distracts the child and is more debilitating to performance than the arousal itself (Deffenbacher, 1980:120; Holroyd and Appel, 1980:131; Hollandsworth et al., 1979:173; Asken and Raham, 1983:386).

- Task-generated interference refers to the tendency to be distracted by irrelevant aspects of the task. Examples of task-generated interference include an inability to leave an unsolved problem, and a preoccupation with time limits. Greater task-generated interference occurs in high-anxiety subjects under high stress than in high-anxious subjects in low-stress conditions or in low-anxious subjects under any condition (Deffenbacher, 1978:250; Anders et al., 1980:41; Gjesme, 1982:179; Dixon and Snyder, 1985:1517). Task-generated interference may also reduce effective problem-solving strategies, as highly test-anxious pupils have been found to use poorer problem-solving strategies (Bruch, 1978:159; Dollinger, 1986:331; Carlson et al., 1982:457; Sarason, 1984:934).

2.6.3.3 Overemphasis of Academic Success

Success in many schools is associated with the accumulation of "correct" answers and "high" test scores in academic subject areas, especially reading, mathematics and science. Pupils with the best scores are often selected for enrichment or given other special opportunities to accelerate their academic prowess. The competition to be "the best" pervades many school climates. But too few children have access to this valued role and the resulting pressures have been acknowledged to contribute to a sense of failure and alienation (Lightfoot, 1987:203; Elias, 1989:394; Wayson, 1985:229).

2.6.3.4 Schools reflect broader societal and parental demands

Over the past years there has been what Jackson (1987:6) describes as the "function explosion". Far too many special interest groups have arisen that push their particular interest or activity onto the school agenda. To name but a few - drum majorettes,
computer clubs, environmental groups, inter-school play festivals, inter-school choir festivals, squash, rowing etc. Not only has there been an explosion in extra-mural activities, but academic standards have been raised (e.g. mathematics), endless time-consuming and meaningless "projects" send pupils and their parents scurrying to libraries after a hard day's work. Three questionable responses to these societal pressures are programmes for revitalizing the "back to basics" movement, bringing into the classroom persons credentialed in content areas such as mathematics, the sciences, and languages but possessed of little background in teaching, and monitoring progress toward educational reform largely through scores on standardized tests.

Elkind (1986:37) points out the pressures resulting from another demand: Parents are looking to schools to guarantee their children's future success. Rather than take a developmental perspective on their children's education, many parents want to see each day used to maximize achievement and skills mastery. Free play is increasingly relegated to a category of "nonproductive use of time". Pressures are being placed on schools to increase academic instruction (Doremus, 1986:34; Roberts, 1986:34).

2.6.3.5 Schools rely on individuals to manage increased demands

Schools have tended to accommodate societal demands as they occur. Historically, however, the pattern of faddish responsiveness to these demands has caused changes to be short-lived an not fully institutionalized, as they have fallen largely upon teachers to carry out and pupils to absorb (Commins, 1986:139; Baldrige and Deal, 1975:97). As pressures have increased, both teachers and pupils have begun to show greater need for "stress management" interventions - as if the stress they are being called on to manage is necessary, appropriate, or desirable (Forman and O'Malley, 1984:163).

Psychologically, the "pressure" children (and teachers) experience is generated in the form of expectations that either cannot be met or are difficult to meet. It is well known that a sense of self-efficacy - a sense that one's efforts are worthwhile and that one can attain things that are rewarding, enjoyable, and fun - is a fundamental component of positive mental health and sound social adjustment (Harter, 1982:88; Rutter, 1983:28; Rogers and Stevenson, 1988:69). It is precisely a sense of self-efficacy that is being squeezed out by school stress and pressure without countervailing influences strong enough to support positive coping and stress-management competencies (Moos, 1984:25).

Structurally, then, tremendous harm is being done because schools use a person-centred concept of stress. Stress is seen as the problem of the child (or teacher).
Palliative in the form of (limited) guidance services and special education services are available if sufficient distress is shown, but the onus is clearly on the child to "shape up" and "mange" the stress. This can be seen most strikingly in the lack of preparation given to teachers in the area of fostering pupils' positive peer relationships, communication, and self-discipline (Duke and Jones, 1985:281; Wayson, 1985:230). Amazingly, preparation and training of special education administrators and teachers is hardly better (Elias and Maher, 1983:343).

It falls mainly to school psychologists to use their background and training to inform educators, policy makers, and parents about both the subtle and the overt signs of distress being shown by children. These symptoms are the cost imposed by an educational system that is too heavily oriented around a narrow notion of academic "success".

2.6.3.6 Treatment as "Marginal People"

Lewin's (1978:39) term "marginal man" refers to the fact that while it is not acceptable for adolescents to act like children, neither are they given the responsibility or social/interpersonal privileges normally associated with adulthood. More specifically, adolescents are expected not to display such outside signs of childlike behaviour as open and free as they can.

2.7 THE EFFECTS OF SCHOOL STRESS ON ADOLESCENTS

The effects of stress are generally seen in the adolescent, mostly expressed in psychological or physiological changes.

2.7.1 Health manifestations of stress on adolescents

The physiology and biochemistry of stress are quite well documented (Ciaranello, 1983:86; Elias, 1989:396). Stressful school environments have been linked to the following psychophysiological effects which affect adolescents' health. They are a risk factor for:

- the cardiovascular system: angina, arrhythmia, migraine, heart attack, hypertension;
- the digestive system and related organs: ulcers, colitis, constipation, diarrhoea, diabetes, stomach aches;
the skeletal-muscular-system: backache, tension headache, arthritis, the accident-prone; and


Stress may lead to the following health impairing habits or behaviours on the adolescent life:

- use of palliatives;
- escapist eating;
- drinking alcohol; and
- use of drugs such as tobacco, tranquilizers, sleeping pills or analgesia. Involuntary reactions may be equally damaging in the long-term, e.g. sleepiness or sleeplessness patterns; poor appetite; loss of weight; shakiness and trembling ultimately evolving into habits or life styles that are risk-factors for a certain disease (Maes et al., 1987:571).

The stress of illness may cause illness behaviour which influences the course of a disease. Therefore, the way in which an adolescent perceives and copes with the stress of illness is the mechanism that influences the disease. For example, Sutherland and Cooper (1990:104) have shown the following coping variables in the well-being of asthmatic adolescents:

- reacting emotionally in asthma attack situations; and
- focussing on asthma in everyday life and maintaining a restrictive life-style.

2.7.2 Shattered self-concept

Under conditions of high stress and failure, adolescents' self-concepts and self-esteem both suffer (D'Zurilla, 1986:136; Strauss et al., 1987:237). While clearly related to alienation and disconnectedness from teachers and parents, this phenomenon is also related to developmental and biological factors. Developmentally, adolescents are more likely to view themselves as the "cause" of externally determined events or situations. Thus, they will tend to internalize their own "badness" as a reason that parents argue about schoolwork or that parents and teachers are at odds about school
performance. Biologically, continued attempts to cope with stress are taxing and drain energies from children that might otherwise be directed to schoolwork or an alternate source of positive self-esteem (Horowitz, 1988:43). The role of negative expectancies in depression is well acknowledged, and a growing amount of clinical evidence links childhood precursors or depressive and even suicidal conditions in adolescence to the cycle of perceived failure and self-blame many children experience in school (Long, 1966:109; Sternberg and Martin, 1988:261).

2.7.3 Disconnectedness from significant others

When adolescents see they cannot achieve the academic success demanded by teachers and parents, there is a tendency for them to feel a growing sense of alienation and disconnectedness from these key socializing influences (Brophy, 1985:236; Elkind, 1986:38; Sarason, 1982:146; Sylwester, 1983:5). The consequences of these feelings become especially salient during adolescence, as children begin to consolidate their sense of self and form a stable identity (Maccoby, 1983:219). During this period, children become intensely aware of their own "standing" relative to others and are vulnerable to the stress arising from unmet expectations. Disconnectedness may be manifested initially as underachievement or lack of motivation in school. Eventually, it may be overshadowed by a pervasive sense of failure and of being thwarted in one's search for an acceptable identity. Disconnectedness underlies the widening gap between subgroups of pupils in schools (Moos, 1984:36), and between children and key adults - a pernicious product of current educational regimen.

2.7.4 Linkage with substance abuse and antisocial behaviour

Jessor and Jessor (1977:43) have shown that delinquency and antisocial behaviour may be interpreted as avoidant, rebellious strategies for coping with the stress of unmet or thwarted expectancies. Elias et al. (1985:116) found that self-reported substance abuse in secondary school pupils was significantly associated with the perception of excessive academic demands and with an accumulation of stressors related to authority, peer, and academic pressure. It may be that the vicious cycle in which many children are trapped takes varying lengths of time to develop and may take the form of varying maladaptive coping strategies. But the role of school stress as a causative, precipitating, or exacerbating factor is growing ever clearer, and the benefits of conditions associated with school stress are growing ever more elusive.
2.8 SCHOOL ORGANIZATIONAL COSTS OF STRESS

All of the stress - strain - health outcome relationships discussed so far in this chapter, have an obvious impact on the organization of the school. Both physical and mental illness renders the child unfit for learning, and combine both to lessen the satisfaction obtained from the learning and teaching situation and/or reduce academical and scholastic achievement levels and learning performance. Thus, there are various ways that stress symptoms or outcomes are reflected in the teaching and learning situation. Stress among pupils in secondary schools may produce reactions which are detrimental to the school's aims and objectives. A variety of action alternatives exists for the dissatisfied and frustrated adolescent to protest and attempt to change a negative school situation which may manifest in the form of:

2.8.1 High drop-out rate

Many school factors have been associated with dropping out of school. Among these are poor reading ability, grade retardation, repetition, misplacement, low or failing marks, inability to get along with teachers, misconduct, and low IQ or mental retardation. There is also a general, vague category that might be labelled apathy, lack of motivation, or a feeling that school is irrelevant. Some pupils are not necessarily emotionally or socially maladjusted but simply lack interest in school work, feel it is a waste of time, and would rather get married or go to work (Svec, 1986:450; Hurrelmann et al., 1988:248). Such youths may be capable of doing acceptable work but have no interest in doing so. Sometimes such a pupil has been placed in the wrong type of programme (Knoff, 1983:549). Pupils who have had to repeat standards and who thus miss friends and feel themselves to be social misfits may develop an intense dislike for school and lose all interest and desire to learn. Similarly, adolescents who have a history of low marks and failure find school an unrewarding, painful experience and cannot wait to get out (Deci, 1985:52). Many children do not drop out but are thrown out or given a temporary suspension, which they turn into a permanent absence. Pupils who are disciplined by temporary suspension are tempted not to return if they have experienced much long-term dissatisfaction or difficulty at school.

2.8.2 Disruption of school programmes

Disruption in school can be defined as behaviour out of place; the conditions for identifying it are a set or ordered relations and a contravention of that order. Disruption is a by-product of systematic ordering and classification, involving rejecting
inappropriate elements. Thus like the notion of "dirt", disruption is a compendium term which include all the rejected elements of ordered systems (Lawrence et al., 1989:17). Innumerable school factors may cause disruptive pupil behaviour, including:

- frustration at not being able to read;
- temperamental inability to cope with lessons;
- limited concentration;
- bored with lessons; bored with school;
- increased frustration in less able pupils particularly because examinations and reports have underlined their academic inadequacies;
- the pupil's need to feel a person of worth;
- not liking the work;
- the system; and
- the failure of the school to deal early with truancy.

Personality reasons may be:

- dislike of authority;
- strongwilled;
- emotionally uncontrollable;
- moodiness;
- temper, needing little provocation;
- argumentative;
- likes to feel big, "gets kicks from being one of the wild characters";
- maladjustment; and
- cultural arrogance. He feels too aloof.
Developmental reasons may be:

- childishness;
- immaturity and laziness;
- obesity;
- low intelligence;
- at the awkward, adolescent stage;
- she is tiny, so won't be put upon; and
- just physical; enjoys pushing and shoving.

Random reasons may be:

- just naughty;
- likes to stir it a bit;
- he thinks he's better than he is; he's very proud;
- wants an exciting life. Has a sense of adventure;
- gets very firm handling at home, so when people reason at school he thinks them weak; and
- friends lead him/her into trouble.

Reynolds (1975:39) and Rutter (1979:4) list the following pertinent factors as responsible for pupil disruptive behaviour in schools:

- time of the day;
- weather conditions;
- children who are absent so that the nature of work groups is changed;
- the moods of individual teachers and pupils;
- the system of rules employed in the school;
• buildings;
• timetable;
• grouping procedures;
• quality of teaching skill; and
• continuity of curriculum.

Disruption in schools takes the form of protests and attempts to change a negative situation and is manifested in the form of:

• poor human relations;
• poor achievement/performance;
• strikes and boycotts; and
• sabotage, vandalism and stealing.

2.8.3 Continual pupil absenteeism

The consequence of learning dissatisfaction must be considered, in that the adolescent may withdraw from the school to escape or avoid a negative situation through absenteeism. Absenteeism may be due to many factors, e.g. family commitments, weather conditions, voluntary withdrawal and illness; but Miner and Brewer (1976:143) found that poor health, especially poor psychological well-being, is a major cause of absenteeism.

There is a positive relationship between stress levels at school and frequency and duration to absenteeism (Muchinsky, 1977:323). Research evidence indicates that failed expectations, inconsiderate leadership, lack of autonomy and poor social support from teachers, parents and peers are all factors associated with high rates of absenteeism among adolescents (Gruneberg and Oborne, 1982:137; Howard et al., 1986:96; Staw et al., 1986:58; Gerhart, 1987:369). In addition, certain adolescent-variables are related to high absenteeism; together with age and tenure (i.e. the young and those identified as school-hoppers), high anxiety, ambition, aggression and emotional insecurity are characteristics of adolescents who are more likely to leave the school (Porter and Steers, 1973:157).
2.9 **CONCLUSION**

In this chapter, the definitions of stress and other related terms were given; the nature of stress in secondary schools, causes of stress both from the psychosomatic - spiritual disposition of the child himself and the schools setting, and its effects on both the physical - mental beings of the child and the school as an organization were discussed.

Since it has been seen in this chapter that stress not properly controlled will certainly produce an inefficient learning force, it becomes important to try to identify any changes that might need to be made in schools in order to make them places for effective learning and teaching situations.

CHAPTER THREE will look into the management skills of controlling stress of adolescents in secondary schools.
3. **THE MANAGEMENT SKILLS FOR CONTROLLING ADOLESCENT STRESS**

3.1 **INTRODUCTION**

Although the nature and extent of evidence for the influences of debilitating stress on psychosocial functioning of children varies, there is overall support for the premise that debilitating stress in secondary schools is an all too prevalent, harmful, and counterproductive by-product of an educational system in imbalance. There are no specific, validated guidelines and procedures to ameliorate the issues raised in CHAPTER TWO. However, there are starting points, based on empirical evidence and sound developmental theory, from which to begin the ongoing process of addressing these issues.

School psychology and guidance have a special role in coordinating efforts to reduce debilitating stress. Through training, research, and publications, school psychologists and guidance teachers are in a position to take the lead in creating methods and procedures to prevent stress-related disorders. The emphasis in this overview of procedures for alleviating debilitating school stress is on the school as an environment for socialization of youthful thinkers and future adults. Throughout, an attempt is made to avoid what Sarason (1982:89) would call "tinkering"; instead, the focus is on sources of second-order change derived from strong theoretical and/or empirical support as starting points, capable of being implemented, studied and refined in the schools.

Stress management involves the following:

- the understanding of the stress response;
- the recognition of stressors;
- the use of stress reduction techniques; and
- the regular incorporation of these into one's lifestyle (Girdano *et al.*, 1990:2; Scrignar, 1983:4; Harvey, 1988:23).

Both pedodiagnostication and pedotherapy will be discussed as the intervention strategies the teachers can utilize in assisting adolescents in understanding and
developing positive responses to stressful events and conditions in their lives. In this chapter the focus will be on the pedotherapeutic assistance the teachers could use in helping the pupils cope with stress in their lives.

3.2 **PEDODIAGNOSTICATION**

Pedodiagnostication means that the experiential world (of personalized significances) of the distressed child due to dysfunctional education or impediments suffered in the process of his or her learning and becoming an adult, is fully explored with a view to ascertaining the nature, degree and causes of the existing stress (Van Niekerk, 1987:168; Martin, 1987:56). To be objective in his diagnosis, the guardian (teacher) can gain access to the adolescent's world of experience by means of the following fundamental educational methods:

3.2.1 **Encounter**

An adolescent may only be truly revealed and become knowable in the "existential encounter" which occurs between him and the teacher. In this respect the teacher wants to get to know the child as a person and to create an interpersonal conversation situation (Salend, 1990: 137). In this encounter the teacher should be able to see and subjectively experience the world as the child does in order to fathom the personalized meanings which he ascribes to his world. The worlds of the teacher and the child are thus transformed into an inter-subjective world: "their world" (Van Niekerk, 1987:58; Jones and Southgate, 1989:86). Salend (1990:136) maintains that there is one infallible way in which teachers can become acquainted with pupils who do not readily reveal their innermost thoughts and feelings, and that is "to live with them in an 'action' rather than a mere 'discussion' style of relationship". In this manner the teacher can become present in the child's world.

3.2.2 **Conversation**

Authentic conversation implies the creation of a shared teacher and pupil world, a world exclusively theirs in which they are gradually and progressively structured together. The quality of togetherness determines the quality of the conversation, that is, being in a particular situation together (whatever the subject may be) is at the heart of the conversation (Van Niekerk, 1987:159; Salend, 1990:136).
The success of educational conversation will largely be determined by the quality and degree to which the following educational essentials are realised:

- actual trust must be evident at all times. The child especially must have confidence and trust in his teacher;

- the encounter between a child and the investigating teacher should take place on a pathic-affective level and also on the grounds of ethical norms. The teacher must constantly see to it that the educational relationship of authority is actualized; and

- the teacher must make himself completely available to the child. The distressed child is then enabled to actualize the educational essentials of trust, understanding and authority with the help of the teacher (Wang et al., 1990:101; Wallace et al., 1988:67).

3.2.3 Educational observation

Educational observation is the systematic, unprejudiced, careful, objective, unhurried and purposeful exploration of the child's situation and the significance the landscapes contained in it have for him. The objective is to come to an understanding of the child's situatedness as a unique person and to evaluate it educationally. This observation should always be an "interpersonal encounter", and must never revert to an observer-experimental subject relationship. Its point of departure should be that very encounter. That which the teacher sees happening in that particular situation at that particular time to the child, must be place against the background of the child's personal historicity and his personal futurity, as both times belong to the child whom he is observing (Salend, 1990:137; De Necker, 1987:34).

The following specific matters should receive the teacher's attention during the period of special observation:

- the child's outward appearance, e.g. does he for example show signs of fatigue and listlessness? or is he obviously perky and full of bounce?;

- general conduct, behaviour and expressions. The way in which a child acts, listens, looks, plays, asks questions, reaches out, grasps, and so on, can be clearly observed (Van Niekerk, 1987:87; Wethington and Kessler, 1986:93; Field et al., 1988:75);
the child's attitude or disposition. With regard to the child's disposition towards work, it is possible to ascertain through observations whether he is willing to shoulder a task, tends to be reluctant and so on;

- the child's affective life. The objective of this observation is first to ascertain what the child's disposition is, whether he tends to be cheerful or depressed, unruffled or labile. The second moment in this educational observation of the child's affect then naturally concerns the effect of relevant matters and events upon him: is his response in accordance with what may be expected (i.e. congruent with the basic significance of the event) or is he "insensitive" to the appeal?; and

- the child's volitional life. It is also possible to draw meaningful conclusions concerning the child by observing how his will is manifested in his actions. It is for example possible to infer whether he is able to choose or to set a goal to himself; whether he tends to vacillate or to be capricious, and so on.

3.2.4 Educational intuition

It may be defined as the teacher's immediate, spontaneous apprehension of practically indiscernible snippets of educational information from the child as if by an inspiration (Van Niekerk, 1987:80; Crisci, 1986:440), and indicates the possession of such knowledge by a teacher who has the potential to sense it because of his educational knowledge (Van Niekerk, 1987:80; Schoonees, 1970:367). According to Sonnekus (1975:130) knowing intuitively means that the teacher is seeing what cannot be seen by others, and it is an attitude of knowing which rests upon an attunement and faith that matters truly are as they appear.

For intuition to play an effective role in the educational dialogue, the teacher must have an absolute and loving interest in the situation in which the child and his educators find themselves to be; intuition must draw from the fund of existing educational knowledge; no behaviour or communication should be regarded as incidental; it should at all times be connected with the possible educational distress or moments hampering the child's full development or learning. This can be achieved by the teacher placing himself in the child's position in an affective sense, in order to feel and experience that the child is subject to, and the teacher must eventually move a distance away from the child's situation in order to interpret it objectively (De Necker, 1987:35; Ekwall and Shanker, 1983:183).
3.3 **PEDOTHERAPEUTIC ASSISTANCE PROGRAMME IN THE SCHOOL**

When "therapy" (usually indicating treatment or a cure of an illness), is compounded with "pedo", the meaning is "to render aid to a child, seen as a person, in order that he may catch up the distance he has fallen behind in his development" (Van Niekerk, 1987:47; Blom *et al.*, 1986:11; Salend, 1990:251).

Pedotherapy is also qualified as an act of re-education because the child cannot possibly in his present situatedness attain the level of maturity which he is capable of (Omizo and Omizo, 1988:267; Van Niekerk, 1987:49; Wallace and McLoughlin, 1988:3). The objective remains to make the child's stressful situatedness in the educational context bearable again in order to restore his sense of perspective.

3.3.1 **Child-centred approaches of coping with stress**

The first principle of stress management is: know thyself. It is important for a child to understand what makes him stress prone or stress resistant when coping with changes from adaptive behaviour to maladaptive behaviour. When stimulating pressure changes from debilitating stress to the subsequent strain can be described as distress (Sutherland and Cooper, 1990:226; Harvey, 1988:39; Van Niekerk, 1987:13).

It is recommended that any pedotherapeutic programme designed to help children learn adaptive coping skills for managing stress include provisions for each of the following key elements:

3.3.1.1 **Self-awareness**

The child must be able to identify the problem areas or lifestyle patterns that are preventing him or her from achieving life goals and then cut through the lifetime of emotional red tape by changing behaviour and re-designing these patterns (Schultz and Heuchert, 1983:62; Phillips, 1978:13; Dyer, 1976:43). Dyer (1976:83) warns against blaming any circumstance or another person for one's failures or an unsatisfying mode of living. Adolescents must be taught to own up, take responsibility and choose a more satisfying way to live (Nucho, 1988:112; Jones and Southgate, 1989:62; Field *et al.*, 1988:227). Often a stressful lifestyle creeps upon adolescents so insidiously that they fail to recognize the presence until they experience negative consequences.
Once an adolescent has identified what is happening in his life in the school and how he wants to live, he can be taught to manage his lifestyle by:

- being more assertive, that is, open, flexible, genuinely concerned with the rights of others, yet at the same time able to establish very well his or her own rights;

- relax and exercise in order to reduce his or her arousal level and bring about a calmer state of affairs from both psychologically, successful relaxation results in enhanced feelings of well-being, peacefulness, a sense of control, and a reduction in felt tension and anxiety. Physiologically, decrease in blood pressure, respiration and heart rate should take place (Matteson and Carrington, 1986:7; Crowder, 1983:37). Fit adolescents may be less psychologically reactive in stressful situations. Exercise is viewed as a coping mechanism which reduces the physiological consequences of stressful situations, alters mood states in the short-term, and alters personality traits, for example anxiety and depression, in the long-term (Falkenberg, 1987:519; Harvey, 1988:35; Nucho, 1988:131);

- "Venting-steam"-stress relief may also be found through talking or writing about your feelings. Venting frustration and anger to an understanding person, teacher, friend or family member is one of the most common means of venting steam. Writing down your thoughts can also effectively reduce feelings of conflict or anger (Eysenck, 1988:63; Fleming, 1986:37; Folsom, 1985:229);

- sleep patterns - "The brain, which controls biological survival, needs rest to maintain its equilibrium ... the brain, without adequate rest and sleep, cannot maintain the biochemical and electrical balances needed for effective functioning ...When the brain is in a state of disequilibrium, and adolescent cannot cope effectively" (Schaffer, 1983:32; Irwin and Anisman, 1984:134; Martin, 1987:48); and

3.3.1.2 Managing Type A behaviour (TAB) in adolescents

Friedman and Rosenman (1974:37-98) offer a number of strategies to manage Type A behaviour (see par. 2.6.1.9) which can be taught to adolescents. Adolescents with type A behaviour must be taught to:

- restrain from being the centre of attention by constantly talking. They must force themselves to listen to the conversation of other people, and should quit trying to finish their sentences;

- try to control their obsessional time-directed life by making themselves aware of it and changing the established pattern of behaviour, for example, trying to desperately submit the assignment at the principal's office at 3 pm when the assignment could wait until tomorrow; in other words, set priorities about what needs to be done and by whom;

- try to understand that the majority of their work and social life does not really require immediate action, but instead requires a quality end product or a fulfilling relationship. They must ask themselves: "Are good judgement and correct decisions best formulated under unhurried circumstances or under deadline pressures?";

- as part of an effort to broaden themselves and lessen specific aspects of obsessional time-dictated behaviour, they must indulge in some outside activities, like attending the theatre, reading, sewing, and so on; and

- try to create opportunities during the day or night when they can totally relax their bodies and minds.

Rosenman and Friedman also try to help the Type A adolescent see how his or her behaviour affects relationships with others. They must be taught to:

- try to make themselves aware of the impact their behaviour have on other people. If they are overtly hostile, certainly one of the most important drill measures they should adopt is one in which they remind themselves of the fact that they are hostile;

- try to reward people for their efforts. They must begin to express in words their thanks or appreciation to others when they have performed services for them, and not like so many hostile Type A subjects, by merely uttering a grunt of thanks. Such behaviour may seem unnatural at first, but it may help
establish a different configuration of behaviours and extinguish the well-rehearsed hostile pattern. They should try to adopt a more relaxed and positive approach to people, greeting them regularly, taking time off to develop social relationships, and so on; and

- not blaming other people for not meeting their ideals or find fault in others for their own failures or disappointments. Friedman and Roseman advise Type A's that they should cease trying to be idealists because they are in fact only looking for excuses to be disappointed and hence hostile towards others.

3.3.2 School-oriented approaches of coping with stress

The rapid growth of interest in adolescent stress management has produced a wide diversity of programmes which have been created to meet the needs of a specific school. These programmes are:

3.3.2.1 The promotion of pathways toward accomplishment

It is necessary to expand opportunities for children to feel connected to schools and to provide more contexts in which they can feel efficacious. At present, most schools convey a primary focus on academic success and relegate other interests and attainments (with the occasional exception of athletics) to a secondary status. As an alternative, schools can attempt to organize to a greater extent around an encompassing concept: Pathways Toward Accomplishment. The concept reflects the view that the society will be enriched by having adults with many competencies, not just academics. Kagan (1984:147) insisted that knowledge is context-dependent; therefore, generalization of high levels of performance in basic academic areas to applied life tasks is far from guaranteed. Children benefit from having a variety of pathways to follow, and from an emphasis on accomplishment defined in terms of their effort and progress (Elias, 1989:399).

Howard Gardner, in his book Frames of Mind (1987:127) and elsewhere, has advocated the 'education of multiple intelligences". He reviews extensive data suggesting that skills tapped by IQ and standardized academic tests are just a subset of the competencies needed and valued in society. A balanced educational system would emphasize seven primary "intelligences" - linguistic, logical-mathematical, spatial, kinesthetic, musical, intrapersonal, and interpersonal - and accomplishment in any of these should be encouraged, lauded, and rewarded (Gardner, 1987:158). A comprehensive review of the impact of schools on children supports these views:
"Thus, the building of self-esteem, interpersonal competence, social problem-solving skills, responsibility, and leadership becomes important both in its own right and as a critical underpinning of success in academic learning" (Good and Weinstein, 1986:1095). Gardner (1987:161) notes that the overdevelopment of any single area is likely to produce a social misfit, and that the current educational system fosters overdevelopment in linguistic and logical-mathematical domains. A sad corollary is that children whose talents lie elsewhere may actually come to feel inferior and alienated (Van Niekerk, 1987:49; Becher, 1986:122; Sheridan and Kratochwill, 1992:119).

3.3.2.2 The teaching of coping skills in the classroom

The course of development is filled with predictable and unpredictable stressors; those with debilitating impact interfere with academic performance and other aspects of social growth. Left unaddressed, children's difficulties in coping can eventuate in maladjustment in adolescence and adulthood. It is therefore logical and necessary to rethink the admission of coping and learning-to-learn skills into the mainstream of educational programming.

Such an action would contribute toward restoring a healthy balance of academic and other aspects of children's lives. Children who manage their stress are more likely to use the skills they have, and as a result they will accomplish more in many aspects of their lives than will children who may possess greater skills that they cannot reliably utilize because of stress (Clabby and Elias, 1986:103). A slightly reduced emphasis on academics in favour of more structured and regularized guidance contacts is associated with improved academic performance (George and Oldaker, 1985:83; Wynne and Walberg, 1985:16). This is consistent with other findings suggesting that children are overloaded with content during the school day and end up with knowledge that is replete with "overlapping fragments of concepts, mistaken connections of events, misconstrual of relationships" (Rogers and Stevenson, 1988:71).

Moreover, there currently exists a series of well-validated, interrelated curriculum-based coping programmes that cover the years from preschool through high school and also address complementary approaches that parents can use with children: preschool-early kindergarten (Shure and Spivack, 1974:94); elementary (Elias and Clabby, 1989:39); middle school (Botvin and Eng, 1980:193); high school (Judge Bakerchild Guidance Clinic, 1982:141; Francescani, 1982:219); parents and educators (Clabby and Elias, 1986:45; Copple et al., 1984:158; Shure and Spivack, 1978:13). These programmes are based on a pedagogical framework that emphasizes dialogical enquiry,
critical thinking, and responsible self-direction. Everyday academic and peer situations are used as the main vehicles for promoting children's thoughtful analysis and action (Barell et al., 1988:16; Sternberg and Martin, 1988:265). The nature of instruction provided by these programmes fosters the use of teaching skills among educators that are relevant both to "social" content and traditional academic domains (Beyer, 1988:49).

Each of these curricula has been subjected to extensive field testing and has been used over a period of years in many sites. They represent an alternative to previous affectively oriented approaches. As recent findings indicate that social decision making and problem solving will be seen increasingly as a core competency (Good and Weinstein, 1986:1095), these critical-thinking-based curricula will clearly meet the superordinate goals of reform advocates who want pupils to be better prepared for their roles as thoughtful, responsible, informed citizens. The training and orientation of school psychologists place them in an ideal role for leadership in reviewing, interpreting, coordinating, and facilitating implementation, supervision, and monitoring and evaluation of competence-enhancing and health-promoting curricula.

3.3.2.3 The reflection of pathways toward accomplishment in the culture of the school

Although many schools adopt stress-management, coping, or family life units, such units are usually presented sporadically and are not viewed as a central part of integrated curriculum planning. However, most "successful" programmes of this type are not introduced as isolated "clinical" interventions. Rather, they are part of a more comprehensive effort to alter the routines, language, and culture of classrooms and schools. Stress and coping cannot be taught adequately by highly stressed teachers or reinforced by at-wit's-end administrators and parents. It can be hypothesized with confidence that when a school and district philosophically accept the value of building children's coping and learning-to-learn skills and the value of developing more and varied Pathways Toward Accomplishment, the most significant and enduring progress will be shown (Barell et al., 1988:16; Elias and Clabby, 1989:82; Goodlad and Oakes, 1988:18). Then, collaboration among educators, school psychologists, and other school personnel who focus on psychosocial growth, as well as parents and children, toward the shared goals of alleviating debilitating stress and improving coping becomes a major vehicle for planning and implementing specific, concrete changes in school climate.
3.3.2.4 Ensuring that schools are physically safe

This may be self-evident, but Rutter (1983:25) has reminded us that children's most elemental sense of safety is paramount to managing stress. If coming to school, staying at school, and leaving school are all sources of threat, then the resulting distress hampers learning and retention in all domains.

3.3.2.5 Increasing the value placed on educational planning

There are several facets of this recommendation. On a short-term basis, many schools do not provide sufficient time or resources to allow for adequate educational planning. Sarason (1982:139) has noted that schools lament, but rarely address, the need for a more efficient concept of "prep" time. More critically, however, the problem is manifested in the area of long-range planning. There is a tendency to seek short-term solutions to complex problems, to meet the public outcry for action by saying "a programme is in place" (Baldridge and Deal, 1975:29); this tendency is occurring too often in the guise of substance abuse and AIDS "prevention". Such efforts tend to either fade quickly or become institutionalized and ignored, the result being that problems persist unabated under an official policy that proclaims they are "coming under control" (Horton, 1988:11). This phenomenon is also typified by schools' response to the push for greater use of computers without careful planning of all aspects of the challenge, including teacher training and back-up support and the impact of introducing a limited-supply object into a mass-training environment. Proposals for restructuring educational leadership characteristically endorse collaboration and anticipation of needs and resources (rather than relying on crisis management) when conducting major educational planning (Lieberman, 1988:8). Once implemented, these approaches will also be potent sources of desirable modeling for pupils.

3.3.2.6 Returning to an action-research tradition

Because schools will continue to reflect societal and parental pressures and demands, it will be unrealistic to expect innovative programmes, curricula, and other procedures to remain stable. Indeed, it is essential that schools retain the capacity to respond to change and become less protective of anachronistic routines that is currently the case (Sarason, 1982:149). One way of doing this is to return to the action-research modality so often used in schools over a quarter century ago (e.g. Corey, 1953:73). The action-research concept is a procedure in which new programmes or ideas are tried, monitored, evaluated, refined, tried again, and so on. Through an interactive
process of implementation, evaluation, and refinement, programmes are constantly improved, or at least their quality is maintained or found to be unworthy of continuation (Price and Smith, 1985:87 provide an excellent, practical overview of the mechanics of action-research). This research and development process encourages staff initiative, morale, involvement, creativity, and sense of ownership (Commins, 1986:105). Much as inquiry and discovery approaches to learning seem to promote mastery and a sense of efficacy in children, the experimental spirit of action-research inquiry can promote the competencies of adults and thereby help alleviate stress (Stemberg and Martin, 1988:269).

School psychologists have an pivotal role either in implementation of local action-research projects or in providing liaison to university-based action researchers (to help them understand bureaucratic realities and obstacles and, especially, to enlighten them about the real-world organizational context in which a prospective action-research project will be undertaken). School psychologists' concerns with an expertise in psychosocial functioning and the children's social world provide key ingredients to enable action-research programmes to be realistic, meaningful, and applicable. Local action-research studies will be especially useful to monitor the outcome of stress-amelioration efforts, with regard to a range of intended and unintended outcomes (Gettigan, 1988:16; Salend, 1990:149).

3.3.2.7 Shifting the emphasis of current training programmes

On a long-term basis, stress will be alleviated as new teachers, school psychologists, and administrators are socialized in accordance with some of the recommendations outlined in this dissertation. Their training can foster a recognition of the role of debilitating stress in education, both at the level of the pupil and that of the learning environment. The social development of children would be recognized more widely as a necessary aspect of educational goal setting. As many observers have pointed out, it is far easier to accomplish such tasks during initial training than through programmes (Lippitt, 1968:372).

3.3.2.8 Promotion of more productive peer interactions

Three interventions in this respect are suggested (Tucker-Ladd, 1990:113; Zahn et al., 1986:351):

i. Cooperative learning, which involves small group of pupils working cooperatively in teams toward academic goals. The major foci of these studies
have been academic achievement, ethnic relations, and social relations (Sharan, 1980:245; Slavin, 1980:323, 1983:117). Cooperation learned in the classroom is an important outcome in a democratic society (Stendler et al., 1951:189). The climate among pupils is of interest here, rather than the teacher-pupil climate, which is stressed in other discussions (e.g. Dunkin and Biddle, 1974:63; Slavin, 1983:118).

Classroom climate is defined as a set of generalized attitudes, affective responses, and perceptions related to classroom processes among pupils. These are distinguished from general prosocial behaviours, such as cooperativeness and competitiveness, and from specific sociometric measures, such as friendship choices. Examples of some class climate instruments used in previous cooperative learning studies include the Learning Environment Inventory (LEI), or Classroom Climate Questionnaire (Walberg and Anderson, 1968:417, used by De Vries and Edwards, 1973:311); the Minnesota School Affect Assessment (Johnson et al., 1979:196); and a measure developed by Slavin based on the LEI (Slavin, 1978:533). The pupil-pupil classroom climate variables measured in these instruments, and in other studies cited below, can be grouped into three categories:

* peer norms supporting mutual achievement;
* a liking for the class or school; and
* mutual concern, that is, a liking for and feeling liked by classmates (Slavin, 1983:143).

A number of studies have found positive effects of cooperative learning on peer norms. The improvement in peer norms for achievement has been found by the Pupil Teams-Achievement Divisions (PTAD) technique (Madden and Slavin, 1983:173; Oickle, 1980:113; Slavin, 1978:536), and Teams-Games-Tournament (TGT) (Edwards and De Vries, 1974:87; Hulten and De Vries, 1976:96; Slavin, 1977:81). Similar effects were noted in a design combining various cooperative learning techniques (Johnson et al., 1979:193).

Many studies also found evidence of increased mutual liking in cooperative classrooms. Some of these used PTAD (Madden and Slavin, 1983:181; Oickle, 1980:129; Slavin, 1978:537), some employed TGT (De Vries and Edwards, 1973:109; De Vries et al., 1974:118; Edwards and De Vries, 1974:178; Johnson et al., 1979:198; Slavin, 1977:84), and other studies
employed a variety of other cooperative methods (Johnson and Johnson, 1982:213; Lazarowitz et al., 1982:40; Slavin et al., 1982:39). Across all the cooperative learning studies, the increase in mutual concern is the most widely supported classroom climate effect, but the PTAD and TGT techniques appear to have a comparable impact on both peer norms and mutual concern.

Cooperative learning methods have been shown both to have as clear an effect on how much pupils like school or their classes. Greater liking for a class has emerged in several TGT investigations (De Vries et al., 1974:84; Edwards and De Vries, 1974:108; Slavin, 1977:78), as well as in studies using other cooperative techniques (Lazarowitz et al., 1982:67; Humphreys et al., 1982:353; Slavin and Karweit, 1981:31; Slavin et al., 1982:10). However, PTAD investigations have not found an increase in pupils' liking of their classes. This may be due to the absence in PTAD of the exciting competitive tournament present in TGT.

Cooperative learning develops cooperative communication and interpersonal skills, skills that alienated pupils particularly need (Sharan and Sharon, 1989:19). It increases pupil achievement and promotes cognitive development (Leming, 1985:29), in that it helps those pupils stressed by their lack of success in school. Additionally, cooperative learning may help to alter or break off relationships that affect pupils in unhealthy ways (Gottfredson, 1988:4).

ii. Cross-age tutoring provides opportunities for distressed pupils to help others and to gain recognition in school. Pupil tutoring may be an effective technique for promoting internality, and does bring about improved attendance. It is suggested that these are two further positive outcomes which lend support to the introduction of cross-age tutoring programmes into the school curriculum. The tutoring schemes carried out by Allen (1976:53) adopted a role-theory framework for the conceptual analysis of tutoring. The basic tenet of role theory is that enactment of a role produces changes in behaviour, attitudes and self-perceptions consistent with expectations associated with the role. "In the case of the child who enacts the role of teacher for another child, the role represents prestige, authority, and feelings of competence; it would seem reasonable to expect that enacting the role of teacher would increase self-esteem and produce a more positive attitude toward school and teachers" (Allen and Feldman, 1976:115; Imich, 1990:108). McWhorter and Levy (1971:223) also favour the role theory explanation. That role play situations can increase
the feelings of competence of the actor has been well demonstrated by role theorists; acting as a tutor can increase the belief that one has control over outcomes.

The social relationship between tutor and tutee is another source of possible benefit. The older children learn to be nurturant and to take responsibility for another person, which fosters more socially mature behaviour in general. Being emulated and respected by a younger child enhances the tutors' self-esteem, and promotes positive social behaviour. Being a role model for a younger child constrains one's behaviour along socially desirable directions.

Allen and Feldman (1976:84) felt that the most central characteristic is "helping another person" which clarifies self-identity and feelings of increased personal competence. Ehly and Larsen (1980:118) propound a similar view in concluding that most of the effectiveness of their tutoring scheme lay in the personal nature of the tutor-tutee interaction. Thelen (1985:238) notes that cooperative learning is a more promising alternative to competitive learning implicitly advocated by most school curricula, and feels that the acquisition of knowledge and skills is being promoted as a way of engaging in personally significant interaction with others. Hargreaves (1983:129) argues that a major shortcoming of British comprehensive schools lies in their failure to give pupils worthwhile social experiences; it would seem that pupil tutoring can go some way towards remedying this situation.

Socio-linguistic theory stresses the effect of social up-bringing on patterns of speech and therefore of self-perception. Goodlad (1979:103) notes that tutoring offers pupils practice in speech codes with which they may be unfamiliar. Ratti (1980:21) points out that, conversely, gains are made because pupil-teachers speak the same language as their charges. Thus there is no breakdown in communication due to conflicting language codes, as discussed by Bernstein (1971:18), and as experienced by a large proportion of pupils in school. It could be hypothesized that pupil-tutoring may serve to reinforce and strengthen the feeling in pupils that schools do offer them a different socio-linguistic experience, thereby increasing their alienation from the situation.

Paolitto (1976:235) argues that planners of pupil tutoring programmes ought to consider the psychological development of the child, and that there ought to be an understanding of what it means for the tutor to act as a teacher. Greenspan
elaborates an integrated theoretical model to account for the efficacy of cross-age tutoring. She lists four crucial aspects of developmental theory as a rationale for adolescents to engage in pupil tutoring:

* by assuming adult roles, adolescents are helped to link transformations in thought from the previous stages of concrete operations to formal operational thinking;
* opportunities for social participation and role-taking stimulate movement from conventional to post-conventional moral thinking;
* role-taking, in combination with experiences related to childhood, assists in adolescent identity formation; and
* the adolescents' need for intimacy will facilitate interpersonal development.

Rasinki (1984:95) suggests cross-age tutoring in his "curricula for caring", noting that it results in increased confidence and self-esteem in both tutors and tutees. Because tutors learn more thoroughly in order to teach, a cross-age tutoring programme would not only provide recognition; it would also increase pupils' academic skills.

iii. Peer counselling enables pupils to seek as well as provide support for one another during times of stress. Because alienated pupils often feel separated from traditional school structures, involving them in peer counselling gives them a chance to interact in a caring way with other pupils, as well as increasing their sense of efficacy at school (Newmann, 1981:561).

3.3.2.9 Developing positive teacher-pupil relationships

Two strategies are readily available (Tucker-Ladd, 1990:113):

* Teacher Expectations for Pupil Achievement (TEPA) is based on having the same expectations and opportunities for low achievers as well as for high achievers. It also encourages using instructional methods that require pupils to participate actively in their learning instead of passively receiving lecture or textbook information. By ensuring that all pupils get favourable attention and
by enabling them to participate actively in class, TEPA can help distressed and
alienated pupils, as well as their teachers.

Teacher advisor/advisee programmes assign pupils to emphatic, supportive
teacher advisors trained in listening and communication skills. This kind of
programme helps pupils identify with a school-related adult model who will be
a friend, listen without judging, and give advice only when requested. Teacher
advisors act as mentors or advocates when pupils are faced with serious
problems (Fetro, 1985:25), greatly enhancing the holding power of the school.

3.3.2.10 Provision of more meaningful in-school experiences that increase pupils' sense of
belonging in the school

To make school more meaningful, educators might consider several interventions:

• The Skills for Living course, which deals directly with issues of import to
adolescents: self-concept, attitudes, feelings, family, friends, marriage,
parenting, money, careers, and philosophy of life. The course can be taught at
any time during high school, but preferably in the freshman year, in order to
deal with problems early on in a pupil's secondary school experience. This
course has an impressive track record for making school relevant to adolescents
(Crisci, 1986:441).

• Community volunteer projects developed and sponsored by the school also
bring special meaning to pupils' lives. By participating in social action
activities, alienated pupils can develop confidence and competence, experience
a connection with the larger community, and work with positive adult role
models. Projects must be meaningful ones in which the pupil's work is really
needed. Examples include assisting in nursing homes, elementary schools, or
facilities for the handicapped; renovating an old house under the direction of
skilled craftspersons; or interning with local social service agencies in law
enforcement or health services (Wehlage et al., 1987:70-73).

• Curricular treatment of meaningful topics can be achieved in several ways.
Seldin (1989:78) suggests weekly "special topic seminars" in pass-fail courses
facilitated by the guidance and auxiliary services department, and Calabrese
(1987:936) recommends discussions and debates to include parents, senior
citizens, and legislators. A practical approach involves bringing up sensitive,
but meaningful topics for discussion (e.g. violence, test-tube babies, suicide,
global economic problems, world hunger, socialized medicine) in social studies
health education, or other classes. Teachers who provide this much needed
activity must be skilled in the use of seminar techniques that establish an
atmosphere that encourages pupils to develop their own opinions on significant
issues (Gray, 1989:23). Enabling pupils to discuss alternatives in an accepting
classroom situation not only makes school more relevant to them; it gives
them practice in the public debate process essential to a democratic society.

An appeals procedure enables all pupils to have a part in the mechanism that
run the school. The alienated pupil often feels wronged or neglected in the
areas of attendance, behaviour, grading, and discipline. An appeals procedure
can be a part of the Pupil Council structure, or, as suggested by Calabrese
(1989:73), it can be a board of arbitration made up of pupils and teachers. It
must have the strong support of the administration. Allowing pupils to appeal
against decisions that they consider arbitrary or unfair provides a forum for
their views and an opportunity to be "origins" instead of "pawns" in the school
setting.

3.3.2.11 In-school Counselling

Counsellors in the schools need to and should be involved in assisting pupils to
manage stress. Omizo and Omizo (1988:273-274) suggest the following implications
for school counsellors:

- counsellors should serve as consultants to teachers, parents, and administrators
  in understanding stress among children and being aware of the indications of
  stress;

- they should conduct workshops for parents and teachers to provide training in
  managing stress for their children and classes;

- children can be taught to manage stress in group and individual sessions;

- because many stressors involve a lack of understanding or confusion about
  important events (i.e., failure and violence, counsellors should facilitate groups
  for not only increasing understanding but coping with these events;

- counsellors can facilitate groups to enhance self-esteem because many stressors
  are related to negative evaluations of the self. Because self-esteem is related to
  so many variables such as academic achievement, not giving in to peer
pressure, and motivation, the enhancement of self-esteem should relieve other stressors;

- councillors should initiate groups to increase pupils' internal locus of control orientation. Increasing feelings of being in control should have an impact on other variables (memory, success in school, attention span) that are related to stress;

- councillors could do family counselling to alleviate some of the stressors related to family problems;

- councillors should conduct guidance classes to increase self-awareness (strengths and weaknesses). This should help in alleviating the stressors that are related to lack of self-understanding and not accepting the self;

- initiating parent groups could help to eliminate the problems related to conflicts and misunderstanding between pupils and parents; and

- counsellors should be able to manage their own stress, so that they can be good role models.

3.3.2.12 Pupil interviews

Interviews are another source of useful information in appraising pupil learning skills. The pupils themselves, parents, teachers, or other adults and children can provide important data that might not be available through any other diagnostication process. Interviews can be adapted to prove practically any problems or considerations (Wallace and McLoughlin, 1988:91). The following basic guidelines may be followed in pupil interviewing situations (Ekwall and Shanker, 1983:195; Van Niekerk, 1987:93):

- make the child comfortable;

- ask only one question at a time;

- use open-ended questions;

- remember that children usually have an inaccurate perception of time and numbers;

- give the child time to think;

- refrain from expressing negative judgements or attitudes;
• respect the dignity of the child;
• avoid the use of technical terms;
• child's participation should not be reduced to a mere "yes" or "no";
• promise only what can be accomplished;
• avoid the use of words that may offend older pupils; and
• a spirit of confidentiality must govern the interview.

Van Niekerk (1987:94) differentiates between:

• the auto-historicity interview which is the interview where the teacher converses with the child about his own history in an educational encounter; and
• the hetero-historicity interview where the teacher enters into a conversation with teachers who are currently or have in the past been involved with the child and particularly with the parents of the child regarding the child's progress toward maturity.

3.3.2.13 Conjoint behavioural consultation with parents and teachers

The importance of involving parents in their children's education has received a great deal of attention in recent years (Epstein, 1984:71, 1985:33; Fine and Carlson, 1992:39; Henderson, 1987:129; Hoover-Dempsey et al., 1987:431; Kroth, 1989:132; Power, 1985:73). The active participation of parents in the school is believed to have positive effects on children, parents, and teachers alike. For example, parent participation has been found to be related to significant academic progress, fewer discipline problems, increased self-esteem and social skills, and better school attendance, study habits, and attitudes toward school (Epstein, 1985:39; Henderson, 1987:135). Becher (1986:111) reviewed the parent involvement literature and concluded that parents involved with their child's teachers:

• developed more positive attitudes about school and school personnel;
• initiated greater community support and involvement;
• developed more positive attitudes about themselves and showed increased self-confidence;
• reported improved parent-child relationship;
• reported an increased amount of contact with the school; and
• developed more effective skills at using positive forms of parenting and reinforcement.

Furthermore, when associated with parent-involvement efforts, teachers:
• became more proficient in their instructional and professional activities;
• allocated more of their own time to instruction; and
• became more involved with the curriculum, experimented more, and developed more pupil-oriented as compared with text-oriented curricular activities.

Parent-teacher relationships were also improved. Indeed, the more clearly home and school individuals can communicate and collaborate in their work with children, the greater the probability for success of educational interventions (Consley, 1987:484; Hansen, 1986:651).

With the recent interest in parent-teacher collaboration, the utilization of home-based programmes to modify children's classroom behaviours has also increased. There are several advantages of home-based contingency systems, including:
• increased communication between parents and teachers;
• time and cost efficiency;
• ease in classroom implementation;
• increased positive parental attention to children; and
• increased generalization of treatment effects (Kelley and Carper, 1988:157).

Parent involvement can occur in various ways. For example, Conoley (1987:197) discussed at least four levels at which parents can become involved in their children's education, with increasing degrees of permeability across home and school boundaries. The function of Level 1 interventions is to share basic information between home and school (e.g. through report cards or phone calls). Level 2 interventions involve collaborative home/school programmes and the establishment of feasible systems of communication between parents and teachers. Interventions at Level 3 entail active involvement of parents in the school, with the intent of reducing discontinuities
between home and school. Level 4 involves the reciprocal education of parents and teachers by each other. Becher (1986:119) also suggests several methods of involving parents in education, including:

- parent meetings and workshops;
- parent-teacher conferences;
- written and personal communication;
- parent visits to the center or classroom; and
- encouragement and inclusion of parents in decision-making and evaluation activities.

To facilitate collaborative work relations among significant individuals in a child's life, simultaneous consultation practices with parents and teachers that recognize and strive to establish linkages across home and school systems seem warranted. From this perspective, simultaneous (i.e., "conjoint") rather than parallel consultation is necessary. A conceptual framework of parent-teacher consultation, that emphasizes the reciprocal, interacting systems in a child's life is depicted in figure 3.1. It must be emphasized that the parent-teacher model depicted in figure 3.1 is not necessarily based on a single parent-teacher consultee interaction. For example, it is assumed that there are benefits associated with having both parents or an extended family involved in the parent-teacher sessions. Moreover, school environments that involve several teachers with one child will often necessitate involvement of multiple teacher consultees. Although multiple consultees add to the complexity and time involved in problem solving, this aspect needs not compromise the consultation process.

Parent-teacher behavioural consultation is defined as a systematic, indirect form of service delivery, in which parents and teachers are joined to work together to address the academic, social, or behavioural needs of an individual (i.e., the child) for whom both parties bear some responsibility. It is designed to engage parents and teachers in a collaborative problem-solving process with the assistance of a consultant, wherein the interconnections between home and school systems are considered critically important. Therefore, an expanded contextual base in assessment and intervention, the cross-setting influences on a child's behaviour, and the reciprocities within and between systems are central. Various process and outcome goals of "conjoint" (parent-teacher) behavioural consultation are presented in figure 3.1.
The advantages of Parent-Teacher Behavioural consultation are as follows:

- By actively joining parents and teachers in a structured collaborative problem-solving framework, comprehensive and systematic data can be collected on the child's behaviour over extended temporal and contextual bases. Continuous data collection across settings may help identify various potential setting events that may be functionally related to, but temporally and contextually removed from, the target behaviour (Wahler and Fox, 1981:336).

- Likewise, consistent programming across settings may enhance generalization and maintenance of consultation treatment effects (Drabman et al., 1979:215).

- Generalization of consultee skills may also be enhanced, because more persons are working collaboratively to attain a shared goal.

- Finally, engaging significant treatment agents across settings can help monitor the occurrence of behavioural contrast and side effects (Kazdin, 1982:361).

3.3.2.14 Mainstreaming programme

Mainstreaming is the provision of appropriate instruction for pupils who are experiencing distress in educational settings with the general pupil population. Implicit in the practice of mainstreaming is the assumption that pupils with and without distress
are more alike than different and that, with adequate training and support, regular educators can provide appropriate instruction to pupils with a range of skill levels (Shore, 1986:186; Salend, 1983:299; Wang et al., 1985:40). The philosophy of mainstreaming rests on the principle that educational, schooling, social, and leisure opportunities for pupils experiencing distress should resemble as closely as possible the patterns, opportunities, and activities enjoyed by their non-stressed peers (Haring and McCormick, 1986:143). Effective mainstreaming involves a sensitivity to and an acceptance of cultural diversity; collaboration among educators, parents, pupils, community agencies, and other available resources (Salend, 1990:viii; Ledeber and Azzara, 1980:4; Margolis and McGettigan, 1988:18). For the placement of pupils in mainstreaming classes to be successful, the school must meet the following criteria:

- normal teacher-pupil ratio which makes possible the individualized instruction;
- there should be no wide discrepancy in pupils' academic skill levels which makes the provision of individualized instruction to all the pupils in the class difficult;
- the child must be compatible with the other pupils in the placement. Peer incompatibility in the mainstream placement is likely to affect the child's motivation, work habits, behaviour and confidence;
- the mainstreaming team must consider the potentially negative impact of the placement on the child (for example, a severe loss of self-esteem);
- the teachers' instructional style should be compatible with the child's educational needs;
- the school must have specialized teaching materials or equipment; and
- the teacher should have one or more aids to assist him or her in the closer monitoring of the child's academic performance;
- the school should actively promote interaction between pupils in regular education and those in special education;
- the classrooms should be conducive to learning in terms of space, ventilation, noise level, and a number of children;
- the child must have the opportunity to be mainstreamed in the full range of regular education subjects and activities; and
the school should provide opportunities for parent involvement. Issues like the frequency and format contact, opportunities to visit the class and serve as a classroom aide, and behaviour modification programmes coordinated between home and school should be available (Fleming and Fleming, 1983:367; Fine and Carlson, 1992:105).

3.3.2.15 Related Services Multidisciplinary Team

The related service may allow the child in distress to be placed in a less restrictive educational setting than if it were not provided (for example, providing in-school counselling to a pupil with emotional problems). Related services are typically provided by a specialist outside the classroom individually or in small groups. This specialist may also consult with the child's classroom teacher in order to coordinate the related service with classroom activities (Woodman and Sherwood, 1980:166). The makeup of the related services multidisciplinary team may be composed of professionals with the following training (Shore, 1986:90; Salend, 1990:32):

- the principal, as the chairperson responsible for coordinating meetings and delivery of services to pupils and their families, and who also ensures that all legal guidelines for mainstreaming, parental involvement, assessment and confidentiality are followed (Parsamella, 1980:170);

- the Regular Educator who has experience working with the pupil can offer information on the pupil's strengths and weaknesses, as well as data on the effectiveness of specific instructional approaches;

- the Special Educator who can assist the multidisciplinary team in developing an Individualized Educational Programme (IEP) by providing data concerning the pupil's academic and social skills, readiness for mainstreaming, and reactions to instructional techniques and materials;

- the School Psychologist who carries out test-related tasks, collects data on pupils by observing them in their classroom and interviewing other professionals who work with the pupils. Many school psychologists are trained as consultants to assist classroom teachers in designing, implementing, and evaluating prereferral interventions and behaviour management systems (Zins et al., 1988:111). Occasionally, school psychologists provide counselling to parents and pupils (Gloeckler and Simpson, 1988:139);
• the Speech and Language Clinicians who deliver services to remediate articulation problems, voice, and fluency disorders, and particularly pupils with language problems. They also offer teachers assistance in fostering the communication skills of pupils within the classroom environment;

• the Social Worker who liaises between the home, the school, and community agencies and who can be instrumental in helping schools obtain services from community agencies, and who can contact agencies concerning the needs of the pupil and parents, as well as the impact of services on the family;

• the Guidance Counsellor who can provide the multidisciplinary team with insights concerning the pupil’s social and emotional development, including self-concept, attitudes toward school, and social interactions with others;

• the Bilingual Educator. Many pupils come from backgrounds where English is not the dominant language spoken, and the bilingual special education offers pupils specialized instruction in their primary language while helping them gain skill in English (Baca and Cervantes, 1984:103). Forward fulfilling the sociocultural and psychological needs of limited English-proficient pupils, the bilingual educator performs a variety of roles, including:

  * teaching curriculum areas using two languages;
  * using the pupil's native language to teach reading;
  * teaching English as a second language;
  * helping pupils develop a positive self-concept;
  * instilling in pupils a sense of pride in their culture;
  * emphasizing positive attitudes toward cultural diversity;
  * assisting in the assessment of pupils from multicultural backgrounds;
  * helping determine an appropriate placement for limited English-proficient pupils;
  * developing an instructional programme that meets the needs of limited English-proficient pupils;
  * evaluating the progress of limited English-proficient pupils; and
* helping parents to become involved in their child's education (Plata and Santos, 1981:178; Bassler and Brissie, 1987:36; Kroth, 1989:129; Power, 1985:69);

the Vocational Educator who offers valuable information concerning the mainstreamed pupil's work, career experiences, and potential. Specific vocational education services include:

* assessing pupils' job skills, aptitudes, and interests;

* developing specific work-related skills and behaviours;

* offering job counselling;

* providing pupils with information and exposure to various jobs through work experiences and job tryouts;

* helping pupils find jobs; and

* serving as a job coach.

In addition, career education focuses on developing awareness, attitudes, habits, interests, and skills relative to employment options (Kokaska and Brolin, 1985:194). Brolin (1982:115) has developed a life-centered career education curriculum of 103 subcompetencies within the domains of daily living skills, personal-social skills, and occupational guidance and preparation that can provide career education to mainstreamed pupils.

Physicians and Nurses. Levine (1982:146) noted that physicians can aid the multidisciplinary team by performing diagnostic tests to assess the pupil's physical development, sensory abilities, medical problems, and central nervous system functioning; providing an understanding of nutrition, allergies, chronic illnesses, and somatic symptoms; planning and monitoring the effectiveness of medical interventions; and discussing the potential side effects of drug interventions.

Because physicians are costly, many medical-related services may be provided by school nurses, who can screen pupils for sensory and physical problems; treat some illnesses; offer explanations of medical records; monitor the effects of pharmacological interventions; teach pupils specific health-care skills; offer training in nutrition, dental care, and other health-related skills;
check the fit, maintenance, and functioning of prosthetic and adaptive devices; and help parents obtain medical and dental services; and

- the Physical and Occupational Therapist. The physical therapist usually focuses on the assessment and training of the lower extremities and large muscles, and help pupils strengthen muscles, improve posture, and increase motor function and range; while the occupational therapist deals with the upper extremities and fine motor abilities, and works with pupils to prevent, restore, or adapt to impaired or lost motor functions, and to develop the necessary fine motor skills to perform everyday independent tasks (Gearheart et al., 1988:197; Gloeckler and Simpson, 1988:158).

For pupils with impaired motor functions, occupational and physical therapists can offer recommendations concerning the use of adaptive equipment, as well as suggestions for adapting materials and classroom environments (Haring and McCormick, 1986:152). In addition to providing direct services to pupils, the physical therapist is a consultant to teachers, nurses, and adaptive physical educators who are responsible for implementing the therapy programme.

In addition to these professionals, the team also should include a parent and, when appropriate, the pupil (Salend, 1990:32).

3.3.2.16 Education/Awareness building

The aim of this form of intervention is to make the child aware of the links between stress, illness and personal behaviour. Concepts which are included in this programme are (Schultz and Heuchert, 1983:62; Phillips, 1978:13-57; Sutherland and Cooper, 1990:245):

- Developing an understanding of the whole child and his or her unique need to learn flexible self-management skills. This means that the teacher will need to come to know the children in the classroom well. This will require a commitment on the part of the teacher to a learning environment whereby meaningful relationships with the pupils are developed, based on caring and concern, mutual trust, and openness, along with a willingness to learn about children from children.

- Helping the child develop a cognitive awareness of the nature of anxiety and stress, along with different ways of coping with them. Behaviour involves two interconnected elements, that is, knowing and doing. It is important, that
children learn more about who they are, what they are comprised of, and why they behave as they do. By learning more about themselves inside and outside their skins, they become aware of how they want to be as well as what they wish to become. With such knowledge the child is armed with the personal insights that will help him or her learn how to better manage the discomfort of painful life experiences. Likewise, this same knowledge can help the child sidestep, not avoid or run away from, potentially painful events when they begin to materialize in school or life.

* Helping the child to learn the process involved in personal problem solving. An increasing amount of literature is beginning to attend to the value of the self-help process in solving personal problems (Polsgrove, 1979:116; Blom et al., 1986:169). This is an encouraging sign for it suggests that we are beginning to discover some specific skills that children can learn to help them do something about the way they feel, and the way they act. This will help children to more readily accept responsibility for their own personal development, and to develop the necessary confidence and willpower to master life-related problems. It is clear that many children (and many adults as well) have very limited resources and alternative ways of helping themselves to feel and act. In many cases, what ways the children do have available for use are stereotypic and rigidly applied. What is needed, of course, is a generic procedure for introspective analysis and decision making that is both flexible and systematic in its application. Such a procedure is often called a basic problem-solving method for managing personal problems.

In his book, *Help Yourself*, Schmidt (1977:14-39) outlines a series of steps for helping a person change whatever needs to be changed. Schmidt's system has proved helpful to adults and children alike in solving personal problems. In very general ways, his system suggests the following sequence of activities in the problem-solving process:

* Be a self-watcher: "What seems to be going on in this situation? What am I experiencing?" Find out what gets you started. Find out what keeps you going.

* Set your goals: "What is it I specifically want to accomplish, to do something about?" Be specific about stating the problem. Spell out how much change is desired. Break down large goals into smaller ones.
Keep track of progress: "How am I doing with this problem? Am I making progress?" Find ways of counting behaviours. Keep charts or graphs.

Help yourself to keep going: "I feel good about this. I feel like I'm making headway. Time for a little pat on the back!" What will help you keep going? What is reinforcing to you that is available? How often do you need some feedback this way?

Evaluating success. Reaching your goal: "I feel confident that I've got this under control now. It's time to go on to other things." Figure out whether you can go on to other problems or whatever else you want to focus on. Know specifically when you've accomplished what you set out to accomplish.

Guide the child in developing plans and skills that lead to more effective coping. This would include training in relaxation as a critical self-management skill.

Use a stress inoculation process to help the child gain successful practice in managing stressful life events across a variety of such events. The saying, "You can lead a horse to water, but you can't make him drink" implies the following facts in this respect:

It is hard to force people to do something they do not want to do for whatever reasons they do not want to do it. People tend to resist change, especially in painful or fearful areas.

Motivation is a key element in any change process. Children need to feel the need to change or be helped to realize they want to change their behaviour, attitudes, feelings, and so forth and to feel they have the personal power to accomplish change successfully.

Children need to proceed slowly for several reasons, one of which is to gain experience in breaking a large goal down into smaller, more manageable steps, in order to feel more in charge, more capable of getting the work done, of accomplishing the task. Therefore, teachers will have to move slowly, shaping the child's stress management skills sequentially, but systematically, as their knowledge of the child's capacity to demonstrate success in learning permits.
The desired stress management programme is one that will help children develop skills that they can apply to specific situations they find stressful as well as across a variety of stressful school and life encounters. There will be a need to teach children the steps involved in personal problem solving, as well as relaxation skills that will match the types of stress reactions children experience, and that help children to effectively cope with stress experiences. This learning process must be organized, systematic, and unfold slowly in order to maximize successful adaptation and to ensure the desired stress inoculation.

As Jaffe et al. (1986:36) suggest, this form of intervention usually takes the form of a lecture, presentation of written materials distributed to pupils, and is often used to initiate and recruit more intensive interventions. These educational programmes have the advantage of reaching large numbers of pupils at a time, and are thus cost effective (Blom et al., 1986:61; Warshaw, 1979:37; Wethington and Kessler, 1986:81).

3.3.2.17 Assessment-focused programmes

This type of stress management aims to identify pupil stress profiles, that is, to highlight problem areas, skill deficits, strengths and/or the high-risk profile. It can be conducted at a small group level initially, by using a combination of stress diaries, interviews, standardized stress inventories, for example, the Adolescent Structured Stress Interview (ASSI) (Field et al., 1988:75), or checklists and group discussions and leading finally to pupil consultation. This is more cost effective than a total one-to-one experience.

3.3.2.18 Skill-building

Essentially, three types of programmes are available:

- Coping skills - Within this category of stress management techniques are all the strategies which deal with the ways that pupils perceive situations, that is, cognitive restructuring and behavioural modification. The aim is to help the child gain control over his or her reaction to a stressor, by modifying maladaptive patterns of thinking and the faulty premises, beliefs, and assumptions which underlie his or her cognitions (Matteson and Ivancevich, 1987:25; Hanson and Pichert, 1986:449; Eysenck, 1982:59). The rationale of cognitive strategies in stress management is to reappraise, relearn, or relabel the way a situation is perceived by logic and reasoning, rather than by emotional reactions that have been ingrained by past habits (Rosch and
Pelletier, 1987:14; Wallack and Winkleby, 1987:927; Van Sell and Schuler, 1981:63). Reappraisal or restructuring often focuses on removing cognitive distortions such as overgeneralization, magnifying and personalization (Beech et al., 1984:87; Ben-Sira, 1985:399; Bhagat, 1983:664). Cognitive restructuring skills include changing the way the child perceives and defines stressful events, personal beliefs, expectations, internal conversations and evaluations the child has about the pressures he or she faces (Jaffe et al., 1986:33; Kline, 1987:29; Knox et al., 1985:529).

Behaviour modification is also used to change or reduce an inappropriate or exaggerated response to stress. Techniques include role play, observation and self-report feedback and can be effectively taught in group sessions (Rosch and Pelletier, 1987:84; Nicholson et al., 1983:223; Ramsey, 1983:97). Strategies might take the form of:

* assertiveness training, which is designed to provide the child with more effective control over his activities;

* time management, this might include training in skills such as goal setting, negotiating, confronting and delegating; and

* career planning; perhaps to establish more realistic goals or to confront the stressors that arise from the school and home interface, for example, problems associated with the dual-career family or the need to relocate.

Interpersonal skills - Managing stress involves learning the skills necessary to work with other people, for example, active listening, effective communication, conflict resolution, teambuilding and developing and maintaining supportive networks (Adams, 1987:98; Baker, 1987:7; Barefoot et al., 1983:62).

3.3.2.19 School setting change

Basically seven points are vital (Griffen et al., 1982:45; Adams, 1987:104-107; Harvey, 1988:33; Schultz and Heuchert, 1983:72; Field et al., 1988:123):

- Clear, understood and accepted goals are essential. They should be specific, measurable and realistic.
- A programme should provide both pupil and school benefits.
- The support and endorsement of the Principal and his heads of various subject Departments, inspectors and so on are essential.
- Develop readiness for stress management training; identify areas of concern, co-ordinate with relevant departments, (for example, medical, staff), identify target population, formulate objectives, outcomes and expectations, anticipate and address criticism (action for overcoming negative attitudes and resistance to stress-control).
- Effective overall planning is essential; determine the course content, identify resources available.
- the focus should be on the acquisition of skills, attitude adjustment and modification of behaviour, that is, a comprehensive approach.
- Stress management should avoid the preoccupation with stress as a negative concept. A successful programme will emphasize the positive and seek to establish and maintain well-being.

Overall, it is necessary to view all the children in the school as people who have needs, personalities, and commitments outside the confines of school life, and begin to realize (and put into practice) that the performance, efficacy, and satisfaction of the child in the school is linked to his or her total life experience (Blom et al., 1986:107; Carro, 1980:126; Elkind, 1982:133; Wolff, 1981:87).

3.3.2.20 Behavioural and cognitive-behavioural treatment interventions

Behavioural and cognitive-behavioural treatment interventions for test-anxious pupils have strong empirical support. In a recent meta-analysis of 562 studies, behavioural and cognitive-behavioural approaches were found to significantly reduce test anxiety and increase performance (Hembree, 1988:48). The efficacy of these treatments in
comparison to other treatment approaches (e.g. study skills training) supports an interference model of test anxiety. In the interference conceptualization of test anxiety, test anxiety disturbs the recall of prior learning, thereby degrading performance.

Despite the documented efficacy of behavioural and cognitive-behavioural therapies in reducing test anxiety, treatment for test anxiety is not widely available or widely used by secondary school pupils. Secondary school pupils may be reluctant to seek therapy and may not avail themselves of an efficacious treatment offered in a clinic setting (Register et al., 1991:115). Test anxious pupils also may have difficulty in maintaining commitments to therapy over time (Allen et al., 1980:173). Given these limitations to treatment use, a more available and cost-effective treatment could enable a greater number of pupils to receive assistance. Bibliotherapy is one treatment modality that could enhance treatment use by pupils because it is inexpensive and convenient.

### 3.3.2.21 Stress Inoculation Bibliotherapy

Bibliotherapy is the use of literary work in the treatment of emotional and physical problems (Glasgow and Rosen, 1978:21, 1984:119). Bibliotherapy is a low-cost form of intervention because it can be implemented with minimal or no therapist contact. Stress-inoculation training involves training in relaxation, cognitive coping strategies, and imaginal exposure. In prior investigations the use of bibliotherapy has been found to reduce simple phobias including flying phobia (Beckham et al., in press), social phobia (Jerremalm et al., 1986:176), and dental phobia (Klepac et al., 1984:115).

A documented limitation in previous bibliotherapy trials is a high attrition rate, ranging from 30% to 50% (Glasgow and Rosen, 1978:23, 1984:139). Despite the large dropout rate, few methods have been investigated to increase bibliotherapy adherence. Adherence may be increased by therapist contact (Meichenbaum and Turk, 1987:98).

### 3.4 CONCLUSION

Both the child and the school must accept some responsibility in the management and control of stress. The first important step is to recognize a need to deal with stress but this must be matched equally with determination and patience, if change is to be effectively introduced and maintained.

CHAPTER FOUR will look into the method or research.
CHAPTER FOUR

4. EMPIRICAL RESEARCH

4.1 INTRODUCTION

The method of research will, in this chapter, be theoretically described. The use of a stress inventory is taken as the most appropriate technique in the carrying out of this research. The empirical research and the construction of the stress inventory are further discussed.

4.2 AIM OF THE RESEARCH

The aim of this research is to:

- determine factors inducing stress in children in Black Secondary Schools in KwaZulu;
- highlight the effects of these stressful experiences on the physical domain, emotional health, mental functions, behavioural efficiency, interpersonal relationships, and personal productivity on the adolescent; and
- give some guidelines to ways of controlling, managing and combating stress in these schools.

The area of concentration will be on the democratization of educational school practice through the involvement of parents, teachers and pupils in transforming public Black secondary schools to stress-free educational learning and teaching situations.

4.3 RESEARCH METHODS AND CHOICE OF THE INSTRUMENT

The most practical research method, which satisfies the validity and reliability demands and with which the desired data could be obtained, should, for the purpose, be implemented. Attention is given to the following:

- personal visits to secondary schools during which the stress inventory could be filled in by the investigation group under the guidance of the researcher;
- a stress inventory which could be filled in at home by the investigation group; and

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a stress inventory which could be filled in at school by the investigation group.

Seeing that the schools forming the sample of this research are within the researcher's working area and thus could be accessible and that the personal presence of the researcher could eliminate unnecessary problems with regard to the filling in of the stress inventory, it was decided upon the first-mentioned method.

4.4 DESCRIPTION OF THE POPULATION

All the pupils in the secondary schools which fall under the jurisdiction and control of the KwaZulu Department of education and Culture, were considered the study population.

The KwaZulu Department of Education and Culture has 365 972 schoolgoing children in secondary schools. Seeing that the carrying out of the study could delay and would have particular financial implications, it was not regarded as practically feasible to investigate the entire field. After consultation with the study supervisor it was decided to limit the study population to KwaZulu secondary school children in the Ladysmith area.

4.5 METHOD OF RANDOM SAMPLING

Samplers like the unrestricted, stratified, systematical, cluster, quota, and multiphased random sampling were considered for use in this investigation. After careful consideration of the advantages and disadvantages of each of these methods, it was decided on cluster random sampling. A cluster random sampling is done when members of the universum are grouped together in schools or classes and all the members of a group must be included in the random sample (De Wet et al., 1981:94). In accordance with this method, it is convenient, quick and economical to select and number groups. In this study, the schools were numbered and the respondents in the school formed the population. The respondents were from the random sample which was used in this investigation.

4.6 RANDOM SAMPLE SIZE

A total of 526 pupils from 15 of the 23 public secondary schools (roughly 25% of the total number of pupils in Ladysmith are in secondary schools) participated in the survey. Of these, 231 were girls and 295 were boys. In Std. 6 forty-one boys and fifty-three girls participated; in Std. 7 twenty-six boys and thirty-two girls; in Std. 8
seventy-one boys and ninety-one girls; in Std. 9 forty-three boys and fifty-five girls and in Std. 10 fifty boys and sixty-four girls.

A sample ranged from remote areas to riot-oriented areas or just cosmopolitan areas. This was done to try to promote an idea of dependent and independent variables in terms of level of awareness.

4.7 COVERING LETTER

In a covering letter to the Principals of the 15 secondary schools, the purpose of the stress inventory was described, and it was indicated that permission of the Circuit Inspector of the KwaZulu Department of Education and Culture had been received to have the stress inventory filled in by a number of secondary school children.

Stressing the confidentiality of the information, an appeal was made to the respondents to respond openly.

4.8 PROCEDURE

With the permission of school principals (who agreed, and were known by their pupils not to have access to completed questionnaires), copies of the instrument were distributed by the investigator to a group of selected pupils which comprised pupils from standards 6-10 (in the case of Senior Secondary Schools) and standards 6-8 (in the case of Junior Secondary Schools). Written guidelines and personal briefings were provided to ensure, as far as possible, standardized administration, and to secure respondents' guarantee of confidentiality. Pupils were asked to return completed questionnaires within 15 minutes (which is the time allotted to break periods) to the investigator who was present in the classroom where the investigation took place. All 500 questionnaires were returned. All data were collected during August, 1992.

4.9 DESIGNING THE STRESS INVENTORY AS MEASURING INSTRUMENT

Although several instruments have been devised to obtain self-reports of adolescent stress (Chandler, 1984:164-168; Kurten, 1989:113-116), there have been, as far as it could be ascertained, only overseas and White South African oriented instruments designed to determine the factors inducing stress among adolescents. As a result of a peculiar situation in Black secondary schools, and especially in KwaZulu, not a single one of these instruments was suitable and appropriate for the use in the investigation in question. It was then decided to construct a distinctive stress inventory which could be
used to measure stress among adolescents in Black secondary schools within their school and cultural context.

With a view to the accuracy and reliability of the investigation, five secondary schools with standards 6-10 and standards 6-8 classes from both the rural and urban areas were visited. The principals of various secondary schools were requested permission to meet a certain number of pupils from all classes in their schools and request them to, on the basis of the following definition of stress, give at least one factor which they feel was responsible for the stress they experienced in their school. The definition read as follows:

Stress can be defined as an experience of unpleasant feelings like tension, frustrations, fear, fury and learned helplessness which results from their daily learning situation (Kyriacon, 1987:145).

The stressors were written down on a piece of paper by the pupils from each class in the presence of the researcher. Valuable contributions on five-hundred and thirty (530) stressors were received and were used together with related items which were identified in the literature to construct a preliminary stress inventory. A number of pupils gave more than one factor. With the first draft, the factors which overlapped, were ambiguous, etc., were eliminated. forty-four (44) stressors were retained, and were presented to a number of judges (colleagues).

The objective was to identify unclear and ambiguous items. On the basis of their suggestions and recommendations the items for the inventory were formulated to fall within the comprehension level of the secondary school pupil. On the ground of data which were obtained from literature studies, the stress inventory was sub-divided into the following sections: (A) demographic particulars; (B) effects of stress; (C) stress management; and (D) stress factors, and consisted of 71 items (see appendix 2).

4.10 THE FIRST DRAFT OF THE STRESS INVENTORY

In Section A of the stress inventory it was necessary to investigate some demographical particulars of the respondents, like: sex; standard; age; highest standard of the school to which he is attached; area where school to which he is attached is situated, i.e. either in the township or rural area; size of his school; number of pupils in his class; subjects package he is following; whether or not he is responsible for the choice of the subject package he is following; if the school he is attached to has a
Head of Department (H.O.D.) responsible for Guidance Services; if the school he is attached to has a guardian teacher; and his eating habits. Such information would help the investigation to ascertain:

- which sex, standard, and age groups experience more stress;
- whether junior secondary schools' respondents or senior secondary schools' respondents experience more stress;
- whether schools in township or rural areas experience more stress;
- whether the size of the school could be a stressor;
- whether the number of pupils in class is a stressor;
- the subject package respondents are following, and if children are not directly or indirectly compelled to take or follow particular subject streams against their wishes;
- whether the unavailability of Guidance H.O.D.'s and guardian teachers in the schools is a stressor; and
- whether wrong eating habits among respondents in KwaZulu are the cause of the stress some of the pupils in this region experience.

Questions in this section were designed as follows:

1. Sex (male or female?)
2. Standard (6 or 7 or 8 or 9 or 10)
3. Age in completed years at 1 September 1992
4. Highest standard of the school to which respondent is attached (7 or 8 or 9 or 10)
5. Area where school, to which respondent is attached, is situated
6. Size of school
7. Number of pupils in respondent's class
8. Subject package respondent is following
9. Is/was respondent responsible for the choice of the subject package he is following?

10. Does the school the respondent is attached to have a head of Department (H.O.D.) responsible for Guidance Services?

11. Does the school to which respondent is attached to have a guardian teacher responsible for children's problems like study problems, orientation of new children, choice of friends, future plans etc?

12. Eating habits (one, two, or three meals a day?)

From the literature survey, it was observed that the stress process is accompanied by cardiovascular disease, cancer, diabetes mellitus, tuberculosis, rheumatoid arthritis, hypertension, ulcers, neuromuscular pain conditions, allergies, common colds, pre-menstrual tension, tension headache and asthma. It became clear that physical illness is not the only domain where stress wreaks havoc; emotional health and mental functions such as memory, concentration, and creativity are also impaired. Behavioural efficiency, interpersonal relationships, and personal productivity are also limited by stress (see paragraph 2.6). The intensity of these will be tested with items in the inventory.

Section B of the inventory contained the following Stress Effects questions:

13. Did you experience any nervousness, anxiety and exertion during 1991-1992 which you feel was/is due to the pressure you experience in school?

14. Did you have any of the following illnesses which you think is attributable to the stress you experience at school? Heart attack, asthma, hypertension, ulcers, constipation, diarrhoea, diabetes, backache, tension headache, arthritis, rheumatism, infections, allergies, cancer, etc.

15. Did you have a feeling of quitting the school during 1991-1992 which you think is attributable to the stressful factors in the school?

16. Did you have a feeling of dodging certain lessons during 1991-1992 which you think is attributable to unbearable incompetence of a subject teacher?

17. Did you have a feeling of mobilising other pupils in 1991-1992 to rebel against the stressful life in school?
18. Did you use palliatives, escapist eating, alcohol, drugs such as tobacco, tranquilizes, sleeping pills or analgesics because of stress in the school?

19. Do you experience the following:
   - a poor vocabulary?
   - grammar difficulties?
   - comprehension difficulties?

20. Do you experience difficulties with study methods?

21. Do you experience poor vocational orientation?

22. Did you experience the following emotional disorders:
   - depression; anxiety; excessive, uncontrollable fear; the urge to steal; the urge to set fire; feeling inadequate as a person; mental exhaustion?

23. Did you have any of the following feelings which you think might have been produced by stress you experience at school?
   - cheating; deliberately getting into trouble to get sent out of class; sleeping in class as an escape; faking illness; contemplating suicide.

Literature studies revealed that stress and response to stress are multi-faceted concepts, and thus the management of stress also takes many forms (cf. paragraph 1.2). It was therefore necessary to learn from the respondents if they ever engage in ways in which they can deal with stress and, hopefully, become more effective at coping with strain and pressure. Another objective was to investigate if schools in KwaZulu Department of Education and Culture have realized the benefits of the introduction of stress management into the school through various interventions which were discussed in chapter 3.

Questions in Section C of the stress inventory entailed Stress Management implications:

24. Does your school have any of the following programmes to support and assist you to overcome stress:
   - Panel for Identification Diagnosis and Assistance (PIDA)?
• In-school counseling?
• Cooperative learning?
• Teaching lessons on stress?

25. Do you jog or do some physical exercises every day?

26. Do you have a proper diet every day? For example, at least one fruit a day, milk, vegetables, protein.

27. Do you give yourself sufficient relaxation, rest and meditation every day?

28. Does the school give you freedom to talk out your problems?

In Section D (Stress factors) of the inventory, the stressors which were identified by the pupils themselves during the first personal visit of the investigator to the schools (cf. paragraph 4.9) were, together, with the stressors identified during literature studies turned into the following questions.

On a scale of 1-4 and by means of an "X", indicate to what degree the factors mentioned below are/were responsible for your stress:

29. Unavailability of subject advisers?

30. Exorbitant (unaffordable) compulsory school fees?

31. Financial reports of collected school funds not furnished to both parents and pupils?

32. Key subjects like Mathematics and Physical Science lacking specialists?

33. Tension which accompanies the unknown scope of an examination paper?

34. Poor support by the Principal and inspectors or other officials and teachers?

35. Too much emphasis on the theoretical aspect of second languages teaching, rather than the practical daily usage of the language?

36. Classrooms inconducive to learning and teaching, e.g. poor ventilation, too cold in winter because classrooms are without ceilings; too warm in summer because of corrugated iron; unelectrified; overcrowded; and so on?
38. Inability of some teachers to reach the child's level, e.g. gap in communication?
39. Negative attitude of some teachers towards children and teaching?
40. Professionally unqualified teachers?
41. Unapproachable, authoritative and too strict teachers, including Principal?
42. Too lenient, permissive and uncaring teachers, including Principal?
43. Understaffed school?
44. Incidents inspired by radical pupil leadership?
45. Having to confirm to too young or too old children?
46. Having no friends?
47. Inadequate learning facilities in classes?
48. Unavailability of library?
49. Poor library facilities and stock?
50. Poor laboratory facilities and equipment?
51. Outdated or old-fashioned teaching methods?
52. Unavailability of sports grounds?
53. Inadequate supply of books and stationary?
54. Unwritten and inconsistent school policy and regulations?
55. Non-involvement of children in the management and decision-making of school policies?
56. Impersonal school curriculum?
57. Lengthy teaching and learning hours in school?
58. Neglect of certain subjects like Religious Education; Guidance; Physical Training; Media Education; Music and Class-Singing?
59. Neglect of certain subjects like Religious Education; Guidance; Physical Training; Media Education; Music and Class-Singing?

60. Tedious compulsory manual labour in the school, e.g. cutting grass, planting new grass, cleaning toilets, cleaning offices, and so on?

61. Too much unscheduled written work and too many assignments each day from different subject teachers given as homework?

62. The "sword" of not being given a second chance of repeating Std. 10?

63. Tension accompanying the late release of matric Examination results by the Department of Education and Training?

64. Compulsory three languages learning?

65. Brutal and unjustified corporal punishment?

66. Teacher carrying a cane during lesson periods to threaten pupils for positive response?

67. Subjects offered at the wrong time of day?

68. Neglect of Parents' Days?

69. Unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school?

70. Uninvolvement of the local community in the school?

71. Any other factor which has not been mentioned in this inventory which you feel causes stress?

4.11 SECOND DRAFT OF THE STRESS INVENTORY

The stress inventory was discussed with the study supervisor and after certain editional modifications had been made, the second draft, which comprised 71 items was composed (appendix 2). The stress inventory was taken for pilot study to a number of secondary schools with classes ranging from standards 6 to 10. Only slight technical modifications hereafter needed attention for the final draft. Approval from the KwaZulu Department of Education and Culture was obtained to have the stress inventory filled-in by the targeted secondary school pupils.

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4.12 FEEDBACK OF THE POPULATION GROUP

<table>
<thead>
<tr>
<th>NUMBER OF SCHOOLS</th>
<th>NUMBER OF QUESTIONNAIRES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STD. 6</td>
</tr>
<tr>
<td>Boys Girls</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>41</td>
</tr>
</tbody>
</table>

It was possible to have a 100% feedback of the number of questionnaires from the respondents because the investigator personally visited the selected schools and the stress inventory was filled in by the investigation group under his guidance.

4.13 EMPIRICAL DESIGN AND STATISTICAL TECHNIQUES

4.13.1 Experimental design

In the research fifteen schools, namely seven Junior and eight Senior secondary schools were selected in an equal manner. An *ex post facto* design was used because information concerning existing characteristics of pupils was gathered and statistically processed. According to De Wet *et al.* (1981:104) *ex post facto* design is generally the choice when one works with the information which is the result of, as the authors put it, the "natural progress of circumstances".

An effort is made to include in the analysis the most comprehensive and representative set of variables which affect academic achievement.

4.13.2 Statistical techniques

Data was processed with the assistance of a computer of the PU for CHE. Use of FREQ (frequency) procedures and MEANS (averages) procedures of the SAS (SAS-Institute, 1985) was made to process the data.

4.14 CONCLUSION

This chapter described the method of research and the construction of the stress inventory. In CHAPTER FIVE the analysis and interpretation of data collected during empirical research will be undertaken.
CHAPTER FIVE

5. RESULTS OF THE RESEARCH

5.1 INTRODUCTION

The purpose of this research is to determine factors causing stress among children in KwaZulu Secondary Schools; to highlight the effect of these stressful experiences on the adolescents' psychosomatic-spiritual domains; and to give some guidelines to ways of controlling, managing and combating stress in these schools. In order to achieve this goal, the average score for each factor is calculated by dividing the sum of the response by the number of respondents who have filled in the item. Thereafter the degree of the stress factors for the whole group of respondents is arranged according to the order of precedence. The same procedure is hereafter followed for standards, various ages, township and rural schools, sizes of schools and the number of pupils per class.

5.2 HYPOTHESES

With reference to the stress inventory, the following hypotheses are investigated:

- various factors cause stress among children in public secondary schools in KwaZulu and are responsible for children's problems which could manifest in physical, mental, emotional, behavioural, interpersonal and personal disturbances symptoms; and

- some factors cause more stress than others.

Subsequently these hypotheses will be tested and interpreted on the basis of the questions and responses as shown in tables 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10 and 5.11.

5.3 DEMOGRAPHIC PARTICULARS OF THE RESPONDENTS

Compare table 5.1 for an exposition of the demographic particulars of the investigation group.
TABLE 5.1: Demographic particulars of the respondents.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N=526 Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>231</td>
<td>43,9</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>295</td>
<td>56,1</td>
<td></td>
</tr>
<tr>
<td>2. Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>94</td>
<td>17,9</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>58</td>
<td>11,0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>162</td>
<td>30,8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>98</td>
<td>18,6</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>114</td>
<td>21,7</td>
<td></td>
</tr>
<tr>
<td>3. Age (on 1 May 1992)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-14</td>
<td>58</td>
<td>11,0</td>
<td></td>
</tr>
<tr>
<td>15-17</td>
<td>181</td>
<td>34,4</td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>197</td>
<td>37,5</td>
<td></td>
</tr>
<tr>
<td>20 and older</td>
<td>90</td>
<td>17,1</td>
<td></td>
</tr>
<tr>
<td>4. Highest standard of the school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. 6-8</td>
<td>151</td>
<td>28,7</td>
<td></td>
</tr>
<tr>
<td>Std. 6-10</td>
<td>357</td>
<td>67,9</td>
<td></td>
</tr>
<tr>
<td>Std. 8-10</td>
<td>18</td>
<td>3,4</td>
<td></td>
</tr>
<tr>
<td>5. Area where school is situated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Townships</td>
<td>194</td>
<td>36,9</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>332</td>
<td>63,1</td>
<td></td>
</tr>
<tr>
<td>6. Size of school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300 and fewer pupils</td>
<td>86</td>
<td>16,3</td>
<td></td>
</tr>
<tr>
<td>301 and 600 pupils</td>
<td>150</td>
<td>28,5</td>
<td></td>
</tr>
<tr>
<td>601 and 1 000 pupils</td>
<td>150</td>
<td>28,5</td>
<td></td>
</tr>
<tr>
<td>1 001 + pupils</td>
<td>263</td>
<td>50,1</td>
<td></td>
</tr>
<tr>
<td>7. Number of pupils per class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 and fewer pupils</td>
<td>2</td>
<td>0,4</td>
<td></td>
</tr>
<tr>
<td>26-35 pupils</td>
<td>55</td>
<td>10,5</td>
<td></td>
</tr>
<tr>
<td>36-50 pupils</td>
<td>41</td>
<td>7,8</td>
<td></td>
</tr>
<tr>
<td>51 + pupils</td>
<td>428</td>
<td>81,3</td>
<td></td>
</tr>
<tr>
<td>8. Subject package followed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Field of Study (without Maths)</td>
<td>214</td>
<td>40,7</td>
<td></td>
</tr>
<tr>
<td>Commercial Field of Study</td>
<td>62</td>
<td>11,8</td>
<td></td>
</tr>
<tr>
<td>General Field of Study (with Mathematics and Science)</td>
<td>250</td>
<td>47,5</td>
<td></td>
</tr>
</tbody>
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Table 5.1 cont...
### Variables

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<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One meal a day</td>
<td>58</td>
<td>11,0</td>
</tr>
<tr>
<td>Two meals a day</td>
<td>42</td>
<td>8,0</td>
</tr>
<tr>
<td>Three meals a day</td>
<td>417</td>
<td>79,3</td>
</tr>
<tr>
<td>More than three meals a day</td>
<td>9</td>
<td>1,7</td>
</tr>
</tbody>
</table>

#### 5.3.1 Analysis

Table 5.1 provides a biographical profile of the investigation group which filled in the stress inventory. It is clear that the investigation group consists of more girls (56,1%) than boys (43,9%); 37,5% of them fall in the age group of 18-19 years and most of the schools accommodate Std. 6-10 (67,9%). Of all the schools, 63,1% are in rural areas and 50,1% of the respondents indicated that their schools have enrollments of over 1 001 pupils. The majority of the respondents revealed that their classes had to accommodate 51 pupils (over crowded), 47,5% of them followed a General Field of Study subject package. Where eating habits were concerned, the study revealed that 79,3% of them had three meals a day.

#### 5.4 INFORMATION ON THE CHOICE OF SUBJECT PACKAGE; AND AVAILABILITY OF GUIDANCE SERVICES IN THE SCHOOL

**TABLE 5.2:** Choice of subject package; and availability of guidance services.

**Item 10**

Are/were you responsible for the choice of the subject package you are following?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>399</td>
<td>75,9</td>
</tr>
<tr>
<td>No</td>
<td>127</td>
<td>24,1</td>
</tr>
</tbody>
</table>

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**Item 11**

Does the school you are attached to have a Head of Department (H.O.D.) responsible for Guidance Services?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>No</td>
<td>523</td>
<td>99.4</td>
</tr>
</tbody>
</table>

**Item 12**

Does the school you are attached to have a guardian teacher?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>526</td>
<td>100</td>
</tr>
</tbody>
</table>

**5.4.1 Analysis**

In table 5.2 the questionnaire sought to know from the respondents if they were responsible for the choice of the subject package they are following, if their schools had heads of Departments for Guidance Services, and if it had guardian teachers. Of the respondents 75.9% indicated that they are/were responsible for the choice of the subject package they are following, 99.4% revealed that their schools did not have Heads of Departments responsible for Guidance Services in their schools, while all of the respondents (100%) indicated that their schools did not have guardian teachers.

**5.4.2 Findings**

The School Guidance and guardianship or "mentorship" system of guiding pupils are neglected in KwaZulu Secondary Schools. In support of this finding, the inspection reports of a total of 125 secondary schools in KwaZulu which were visited in September 1991 for the purpose of evaluating the teaching of School Guidance indicated that School Guidance is not rendered as a service in most schools because of the absence of textbooks for the subject and the lack of posts for Guidance teachers in high schools (KwaZulu Annual Report, 1991:46).
5.5 **EFFECTS OF STRESS ON THE PSYCHOSOMATIC-SPIRITUAL DOMAIN OF THE RESPONDENTS DURING 1991-1992**

TABLE 5.3: Effects of stress on the psychosomatic-spiritual domain of the respondents.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N=526</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Feelings of nervousness, anxiety, and exertion due to school pressure.</td>
<td>376</td>
<td>150</td>
</tr>
<tr>
<td>Illnesses experienced:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• asthma</td>
<td>66</td>
<td>460</td>
</tr>
<tr>
<td>• constipation</td>
<td>190</td>
<td>336</td>
</tr>
<tr>
<td>• tension headache</td>
<td>414</td>
<td>112</td>
</tr>
<tr>
<td>• dizziness</td>
<td>249</td>
<td>277</td>
</tr>
<tr>
<td>• being tired all the time</td>
<td>387</td>
<td>139</td>
</tr>
<tr>
<td>• insomnia</td>
<td>161</td>
<td>365</td>
</tr>
<tr>
<td>Feelings of quitting the school produced by stress in school</td>
<td>209</td>
<td>317</td>
</tr>
<tr>
<td>Dodging lessons because of the unbearable subject teacher incompetence</td>
<td>305</td>
<td>221</td>
</tr>
<tr>
<td>Feeling of mobilising pupils to rebel against school stress</td>
<td>33</td>
<td>393</td>
</tr>
<tr>
<td>Feelings produced by school stress:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• cheating</td>
<td>320</td>
<td>206</td>
</tr>
<tr>
<td>• deliberately getting into trouble to get sent out of class</td>
<td>96</td>
<td>430</td>
</tr>
<tr>
<td>• sleeping in class as an escape</td>
<td>231</td>
<td>295</td>
</tr>
<tr>
<td>• faking illness</td>
<td>210</td>
<td>316</td>
</tr>
<tr>
<td>• contemplating suicide</td>
<td>67</td>
<td>459</td>
</tr>
</tbody>
</table>

Table 5.3 cont...
<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use of the following because of school stress:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• palliatives</td>
<td>108</td>
<td>20,5</td>
</tr>
<tr>
<td>• alcohol</td>
<td>113</td>
<td>21,5</td>
</tr>
<tr>
<td>• tobacco</td>
<td>175</td>
<td>33,2</td>
</tr>
<tr>
<td>• sleeping pills</td>
<td>68</td>
<td>13,0</td>
</tr>
<tr>
<td></td>
<td>418</td>
<td>79,5</td>
</tr>
<tr>
<td></td>
<td>413</td>
<td>78,5</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>67,8</td>
</tr>
<tr>
<td></td>
<td>458</td>
<td>87,0</td>
</tr>
<tr>
<td><strong>Experiencing emotional disorder:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• depression</td>
<td>409</td>
<td>77,7</td>
</tr>
<tr>
<td>• anxiety</td>
<td>405</td>
<td>77,0</td>
</tr>
<tr>
<td>• excessive, incontrollable fear</td>
<td>237</td>
<td>45,1</td>
</tr>
<tr>
<td>• the urge to steal</td>
<td>232</td>
<td>44,1</td>
</tr>
<tr>
<td>• the urge to set fire</td>
<td>42</td>
<td>8,0</td>
</tr>
<tr>
<td>• feeling inadequate as a person</td>
<td>354</td>
<td>67,3</td>
</tr>
<tr>
<td></td>
<td>172</td>
<td>32,7</td>
</tr>
<tr>
<td>• mental exhaustion</td>
<td>417</td>
<td>79,3</td>
</tr>
<tr>
<td></td>
<td>109</td>
<td>20,7</td>
</tr>
<tr>
<td><strong>Experiencing physical illnesses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• poor sight</td>
<td>170</td>
<td>32,3</td>
</tr>
<tr>
<td>• poor hearing</td>
<td>121</td>
<td>23,0</td>
</tr>
<tr>
<td>• poor attention span</td>
<td>434</td>
<td>82,5</td>
</tr>
<tr>
<td>• reading difficulties</td>
<td>431</td>
<td>81,9</td>
</tr>
<tr>
<td>• migraine headaches</td>
<td>337</td>
<td>64,1</td>
</tr>
<tr>
<td>• poor memory</td>
<td>432</td>
<td>82,1</td>
</tr>
<tr>
<td>• menstrual disturbances</td>
<td>184</td>
<td>35,0</td>
</tr>
<tr>
<td>• painful urinations</td>
<td>60</td>
<td>11,4</td>
</tr>
<tr>
<td>• difficulty in sitting still</td>
<td>255</td>
<td>48,4</td>
</tr>
<tr>
<td>• acting before thinking</td>
<td>314</td>
<td>59,7</td>
</tr>
<tr>
<td>• physical exhaustion</td>
<td>375</td>
<td>71,3</td>
</tr>
<tr>
<td>• skin diseases, e.g. eczema, acne, hives</td>
<td>199</td>
<td>37,8</td>
</tr>
</tbody>
</table>
5.5.1 **Analysis**

Table 5.3 presents responses of the effects of stress and their extent on the physical, emotional, behavioural and interpersonal domains of the respondents during the years 1991-1992. Of all the respondents, 71.5% indicated that they had experienced nervousness, anxiety and exertion; 78.7% had suffered tension headache; 73.6% had experienced being tired all the time; 57.9% had had a feeling of dodging certain lessons because of the unbearable incompetence of a subject teacher; 60.9% had had feelings of cheating; 77.7% had experienced depression; 77% had experienced anxiety; 67.3% had felt inadequate as a person; while 79.3% had experienced mental exhaustion, which they felt is/was caused by the stress they experience in school. Of all the groups, 82.5% revealed that they were experiencing poor attention span; 81.9% were experiencing reading difficulties; 64.1% suffered migraine headaches; 82.1% were experiencing poor memory; 59.7% had tendencies of acting before thinking; while 71.3% were experiencing physical exhaustions.

5.5.2 **Findings**

According to Henderson (1979:37-39) tension headaches, being tired all the time and depression are symptoms of burnout; while Cotler and Guerra (1976:59) propound that anxiety is known to affect all aspects of a person’s capacity to function because of the following common somatic and motor reactions to it: flushing, heart palpitations, feeling of weakness, intestinal distress, chest tightness, incoordination, muscular tightness, and "freezing" or "going blank". Some common affective and cognitive reactions to anxiety and nervousness include: inattention, forgetfulness, agitation, worry, depression, irritability, distractibility, dread and sleep disturbances. On the basis of these facts and the exposition of the analysis of table 5.3, it could be deduced that most pupils in KwaZulu Secondary Schools are experiencing stress. If unchecked, stress can result in total emotional breakdown ("Burnout").
5.6 LANGUAGE, METACOMPREHENSION, STUDY METHODS AND VOCATIONAL DEFICIENCIES

TABLE 5.4: Language, metacomprehension, study methods and vocational deficiencies.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Experiencing:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• a poor vocabulary</td>
<td>497</td>
<td>29</td>
<td>94,5</td>
</tr>
<tr>
<td>• grammar difficulties</td>
<td>458</td>
<td>68</td>
<td>87,1</td>
</tr>
<tr>
<td>• comprehension difficulties</td>
<td>454</td>
<td>72</td>
<td>86,3</td>
</tr>
<tr>
<td>• study methods difficulties</td>
<td>434</td>
<td>92</td>
<td>82,5</td>
</tr>
<tr>
<td>• poor vocational orientation</td>
<td>403</td>
<td>123</td>
<td>76,7</td>
</tr>
</tbody>
</table>

5.6.1 Analysis

Of all the schools, 94,5% of the respondents indicated that they had a poor vocabulary; 87,1% had grammar difficulties; 86,3% had comprehension difficulties; 82,5% had study methods difficulties; while 76,7% had poor vocational orientation.

5.6.2 Findings

Analysis of responses in table 5.4 reveal that most of the children in KwaZulu Secondary Schools are experiencing aphasia (cf. paragraph 2.5.1.3); metacognitive problems in their learning (cf. paragraph 2.5.1.6); and poor vocational orientation which could be caused by the unavailability of School Guidance Services and Guardianship or mentorship in their schools (cf. paragraph 5.4.1).
5.7 WAYS OF COPING WITH STRESS

TABLE 5.5: Coping strategies.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N=526</th>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Programmes to support and assist in overcoming stress:</td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>• PIDA</td>
<td>0</td>
<td>526</td>
<td>0,0</td>
<td>100,0</td>
</tr>
<tr>
<td>• in-school counselling</td>
<td>0</td>
<td>526</td>
<td>0,0</td>
<td>100,0</td>
</tr>
<tr>
<td>• cooperative learning</td>
<td>0</td>
<td>526</td>
<td>0,0</td>
<td>100,0</td>
</tr>
<tr>
<td>• teaching lessons on stress</td>
<td>0</td>
<td>526</td>
<td>0,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Jogging or doing physical exercises daily</td>
<td>128</td>
<td>398</td>
<td>24,4</td>
<td>75,6</td>
</tr>
<tr>
<td>Having a proper diet every day, e.g. fruit, milk, vegetables, protein</td>
<td>190</td>
<td>336</td>
<td>36,1</td>
<td>63,9</td>
</tr>
<tr>
<td>Giving themselves sufficient relaxation, rest and meditation daily</td>
<td>312</td>
<td>214</td>
<td>59,3</td>
<td>40,7</td>
</tr>
<tr>
<td>Given freedom to talk out their problems in school</td>
<td>47</td>
<td>479</td>
<td>9,0</td>
<td>91,0</td>
</tr>
</tbody>
</table>

5.7.1 Analysis

In table 5.5 it was endeavoured to find out if any measures were undertaken to help and guide pupils combat stressful experiences in their schools. All respondents (100%) indicated that they did not have the following programmes:

- Panel for Identification, Diagnosis and Assistance (PIDA);
- in-school counselling;
- cooperative learning; and
- teaching lessons on stress.
Of all the respondents, 63.9% indicated that they did not have healthy diets including at least one fruit a day, milk, vegetables and protein on a daily basis; while 75.6% indicated that they had not adopted the healthy culture of jogging or engaging in physical exercises every day; and 91% indicated that their schools did not give them freedom to talk out their problems.

5.7.2 Findings

Analysis of responses in table 5.5 indicates that nothing or very little is done in schools to develop the conative, cognative and affective aspects of the child's life in a healthy and balanced educational practice in all the schools. The last item in table 5.5 indicates some educational repression, i.e. lack of opportunities for freedom of speech and communication in most schools. The culture and health value of physical fitness for stress relief has not yet been adopted by most of the pupils in KwaZulu Secondary Schools.

5.8 STRESS FACTORS OF THE TOTAL NUMBER OF RESPONDENTS

TABLE 5.6: Stress factors of the total number of respondents, boys and girls arranged in order of precedence, i.e. from high to low, according to mean.

<table>
<thead>
<tr>
<th>Order of precedence</th>
<th>Variables</th>
<th>All resp.</th>
<th>Boys</th>
<th>Girls</th>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=526</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>Poor library facilities and stock</td>
<td>3.98</td>
</tr>
<tr>
<td>32</td>
<td>32</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>No Educational Assistance Services in the school</td>
<td>3.97</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>Classes too crowded</td>
<td>3.96</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>Poor laboratory facilities and equipment</td>
<td>3.96</td>
</tr>
</tbody>
</table>

Table 5.6 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>All resp.</th>
<th>Boys</th>
<th>Girls</th>
<th>Factors</th>
<th>All resp.</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>Inadequate supply of books and stationery</td>
<td>3.95</td>
<td>3.95</td>
<td>3.97</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>Inadequate facilities in classrooms</td>
<td>3.93</td>
<td>3.94</td>
<td>3.92</td>
</tr>
<tr>
<td>43</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>Unavailability of a News Letter informing parents and the public about curricular activities in school</td>
<td>3.93</td>
<td>3.94</td>
<td>3.92</td>
</tr>
<tr>
<td>22</td>
<td>8</td>
<td>13</td>
<td>4</td>
<td>Non-involvement of children in the management and decision making of school policies</td>
<td>3.91</td>
<td>3.83</td>
<td>3.97</td>
</tr>
<tr>
<td>39</td>
<td>8</td>
<td>6</td>
<td>12</td>
<td>Brutal and unjustified corporal punishment</td>
<td>3.91</td>
<td>3.94</td>
<td>3.88</td>
</tr>
<tr>
<td>37</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>Tension accompanying the late release of Matric Examination results by the D.E.T.</td>
<td>3.90</td>
<td>3.90</td>
<td>3.91</td>
</tr>
<tr>
<td>40</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>Teacher carrying a cane during lesson periods to threaten pupils for positive results</td>
<td>3.88</td>
<td>3.87</td>
<td>3.88</td>
</tr>
<tr>
<td>23</td>
<td>12</td>
<td>20</td>
<td>9</td>
<td>Impersonal school curriculum</td>
<td>3.83</td>
<td>3.71</td>
<td>3.91</td>
</tr>
<tr>
<td>44</td>
<td>13</td>
<td>16</td>
<td>11</td>
<td>Uninvolvement of the local community in the school</td>
<td>3.82</td>
<td>3.74</td>
<td>3.89</td>
</tr>
<tr>
<td>35</td>
<td>14</td>
<td>12</td>
<td>16</td>
<td>Too much unscheduled written work and too many assignments each day from different subject teachers given as homework</td>
<td>3.81</td>
<td>3.86</td>
<td>3.79</td>
</tr>
</tbody>
</table>

Table 5.6 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>All resp.</th>
<th>Boys</th>
<th>Girls</th>
<th>Factors</th>
<th>All resp.</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>15</td>
<td>9</td>
<td>21</td>
<td>Compulsory exorbitant and unaffordable school fund</td>
<td>3.78</td>
<td>3.93</td>
<td>3.66</td>
</tr>
<tr>
<td>34</td>
<td>16</td>
<td>14</td>
<td>17</td>
<td>Too many unscheduled tests within a short space of time</td>
<td>3.77</td>
<td>3.82</td>
<td>3.73</td>
</tr>
<tr>
<td>21</td>
<td>17</td>
<td>20</td>
<td>15</td>
<td>Unwritten and inconsistent school policy and regulations</td>
<td>3.76</td>
<td>3.71</td>
<td>3.81</td>
</tr>
<tr>
<td>41</td>
<td>18</td>
<td>15</td>
<td>18</td>
<td>Subjects offered at the wrong time of day</td>
<td>3.74</td>
<td>3.77</td>
<td>3.72</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
<td>22</td>
<td>19</td>
<td>Lack of adequately qualified teachers in Physical Science, Mathematics, and General Science</td>
<td>3.69</td>
<td>3.70</td>
<td>3.68</td>
</tr>
<tr>
<td>8</td>
<td>19</td>
<td>33</td>
<td>14</td>
<td>Incidents inspired by radical pupil leadership</td>
<td>3.69</td>
<td>3.48</td>
<td>3.84</td>
</tr>
<tr>
<td>3</td>
<td>21</td>
<td>19</td>
<td>23</td>
<td>Professionally unqualified teachers</td>
<td>3.68</td>
<td>3.72</td>
<td>3.65</td>
</tr>
<tr>
<td>33.1</td>
<td>22</td>
<td>23</td>
<td>21</td>
<td>Tedious compulsory cutting of grass</td>
<td>3.67</td>
<td>3.68</td>
<td>3.66</td>
</tr>
<tr>
<td>33.3</td>
<td>23</td>
<td>23</td>
<td>26</td>
<td>Tedious compulsory cleaning of toilets</td>
<td>3.64</td>
<td>3.68</td>
<td>3.61</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>16</td>
<td>28</td>
<td>Understaffing</td>
<td>3.63</td>
<td>3.74</td>
<td>3.55</td>
</tr>
<tr>
<td>42</td>
<td>24</td>
<td>18</td>
<td>28</td>
<td>Neglect of Parents' Days</td>
<td>3.63</td>
<td>3.73</td>
<td>3.55</td>
</tr>
<tr>
<td>36</td>
<td>26</td>
<td>26</td>
<td>27</td>
<td>The &quot;sword&quot; of not being given a second chance of repeating Standard 10</td>
<td>3.61</td>
<td>3.66</td>
<td>3.57</td>
</tr>
</tbody>
</table>

Table 5.6 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>All resp.</th>
<th>Boys</th>
<th>Girls</th>
<th>Order of precedence</th>
<th>Factors</th>
<th>Mean All resp.</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>27</td>
<td>29</td>
<td>24</td>
<td>Too lenient, permissive and uncaring principal and teachers</td>
<td>3.59</td>
<td>3.56</td>
<td>3.62</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>25</td>
<td>35</td>
<td>Impersonal atmosphere at school</td>
<td>3.52</td>
<td>3.67</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>29</td>
<td>37</td>
<td>24</td>
<td>Outdated or old fashioned teaching methods</td>
<td>3.51</td>
<td>3.38</td>
<td>3.62</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>30</td>
<td>28</td>
<td>32</td>
<td>Audited financial statements not furnished to parents and/or pupils</td>
<td>3.50</td>
<td>3.58</td>
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</tr>
<tr>
<td>33.2</td>
<td>30</td>
<td>33</td>
<td>30</td>
<td>Tidious compulsory planting of new grass</td>
<td>3.50</td>
<td>3.48</td>
<td>3.52</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>27</td>
<td>33</td>
<td>Negative attitude of some teachers towards children and teaching</td>
<td>3.50</td>
<td>3.59</td>
<td>3.42</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>33</td>
<td>32</td>
<td>31</td>
<td>Lengthy teaching and learning hours in the school</td>
<td>3.48</td>
<td>3.49</td>
<td>3.46</td>
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</tr>
<tr>
<td>26</td>
<td>34</td>
<td>31</td>
<td>38</td>
<td>Neglect of certain subjects</td>
<td>3.44</td>
<td>3.51</td>
<td>3.38</td>
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</tr>
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<td>33.4</td>
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<td>40</td>
<td>Tidious compulsory cleaning of offices</td>
<td>3.42</td>
<td>3.54</td>
<td>3.34</td>
<td></td>
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<tr>
<td>18</td>
<td>36</td>
<td>43</td>
<td>19</td>
<td>Unavailability of sports grounds</td>
<td>3.40</td>
<td>3.06</td>
<td>3.68</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>36</td>
<td>36</td>
<td>35</td>
<td>Unapproachable, authoritative and too strict principal and teachers</td>
<td>3.40</td>
<td>3.41</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>38</td>
<td>39</td>
<td>33</td>
<td>Compulsory three languages learning</td>
<td>3.34</td>
<td>3.24</td>
<td>3.42</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>39</td>
<td>35</td>
<td>41</td>
<td>Unavailability of library</td>
<td>3.26</td>
<td>3.38</td>
<td>3.17</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.6 cont...
## Analysis

In table 5.6 the responses on the 47 stress factors of all the respondents are presented according to mean of precedence from high to low; thereafter follows a comparative analysis on the responses of boys and girls who participated in this research.

### 5.8.1.1 An analysis of the stress factors among the whole group of respondents

For the purpose of this study only the first ten variables which according to the mean are responsible for the most stress will be mentioned.

From the responses as contained in table 5.6 (cf. appendix A, section D, items 1-44) appears that poor library facilities and stock was regarded by the total investigation group, as the most important factor which causes stress among them (cf. variable 15).
No Educational Assistance Services in the school took position 2 of the range order (cf. variable 32). Too crowded classes (cf. variable 13) and poor laboratory facilities and equipment (cf. variable 17) took respectively the third and fourth positions of the range order. In the fifth position follows inadequate supply of books and stationery (cf. variable 19). The factors which respectively took positions 6 and 7 were the inadequate facilities in classrooms (cf. variable 12) and unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school (cf. variable 43). Non-involvement of children in the management and decision-making of school policies (cf. variable 22) and brutal and unjustified corporal punishment (cf. variable 39) took positions 8 and 9 respectively. The factor that took position 10 was tension accompanying the late release of Matric Examination results by the Department of Education and Training (cf. variable 37).

It is interesting to note that the mean scores of the responses on variables 15, 32, 13, 17, 19, 12, 43, 22, 39 and 37 are very close to one another which implies that these factors are regarded by almost the whole investigation group to be responsible for their particularly great degree of stress.

It is also interesting to note that, against the researchers expectations, variables 3 and 24 are not in the top range of the stressors, which is an indication that factors like: professionally unqualified teachers; and too many intracurricular activities at the expense of extracurricular activities, do not cause particularly great stress for the investigation group.

All stressors mentioned in the stress inventory appear to cause some degree of stress for the investigation group.

5.8.1.2 A comparative analysis of the stressors as they were given by both boys and girls

- Table 5.6 shows that boys gave variable 32 the highest mean score of 3.98 which is an indication that they regard a factor like no Educational Assistance Services in the school, to be most stressful.

- It is interesting to note that girls, together with the responses of the whole group, gave variable 15 the highest mean score of 3.99 which is an indication that, like the whole investigation group, they rate a factor like poor library facilities and stock, to be most stressful.

- It is interesting to note that factors like inadequate facilities in classrooms (cf. variable 12); and unavailability of a News Letter informing parents and the
public about intracurricular and extracurricular activities in school (cf. variable 43) were respectively rated by the whole group, boys and girls on position 6 and 7 of the range order, which is an indication that these factors affect the whole group to the same degree.

5.8.2 Findings

The following factors which are in the first 10 stressors of the range order seem to have an impact on the academic achievement of the pupils in question:

• poor library facilities and stock;
• no Educational Assistance Services in the school;
• poor laboratory facilities and equipment;
• inadequate supply of books and stationery; and
• inadequate facilities in classrooms.

The following four factors of the top ten stressors seem to have a negative influence on the interpersonal relationships between teachers, pupils and parents:

• classes too crowded;
• non-involvement of children in the management and decision making of school policies;
• brutal and unjustified corporal punishment; and
• unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school.

The last factor in the 10 top range has negative impact on the psychosomatic spiritual life of pupils in question:

• tension accompanying the late release of matric Examination results by the Department of Education and Training.

A factor like poor library facilities and stock could be responsible for the language, metacomprehension, and study methods deficiencies, e.g. a poor vocabulary; and grammar, comprehension, and study methods difficulties that the majority of the
respondents are experiencing, while a factor like no Educational Assistance Services in the school could be responsible for poor vocational orientation most of the respondents experience (cf. table 5.4; paragraph 5.6.1).

Factors like non-involvement of children in the management and decision-making of school policies; and brutal and unjustified corporal punishment could be responsible for incidents inspired by radical pupil leadership (cf. paragraph 1.3; table 5.6, variable 8).

5.9 COMPARATIVE ANALYSIS

A comparative analysis of the responses of the various groups of the respondents on the 47 stressors is presented in tables 5.7, 5.8, 5.9, 1.10, and 5.11, for example:

- Table 5.7 analytically compares stressors as were given by standards 6, 7, 8, 9 and 10;
- Table 5.8 analytically compares stressors among 12-14 year olds, 15-17 year olds, 18-19 year olds, 20 year olds and older adolescents;
- Table 5.9 analytically compares stressors among pupils in schools with 300 and fewer, 301-600, 600-1,000 and 1,001 and above enrollments;
- Table 5.10 compares stress factors among township and rural areas adolescents; and
- Table 5.11 compares stress factors among pupils with 26-35 pupils, 36-50 pupils, and 50 and more pupils per class.

These tables were designed with the aid of the biographical information which was obtained from the pupils. The stressors are arranged according to mean order of precedence, i.e. from high to low. This was done in order to, on the basis of comparative analysis, determine which of the 47 stressors affect each of the above groups most, and to find out which of the comparable groups above experience more stress.

Only those variables with a mean score of 4.00 will be mentioned.

5.9.1 Analytically compared stressors as were given by standards 6, 7, 8, 9 and 10
TABLE 5.7: Factors causing stress in standards 6, 7, 8, 9, and 10 arranged according to mean order of precedence.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard</th>
<th>Order of precedence</th>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Lack of adequately qualified teachers in Physical Science, Mathematics and General Science</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Inadequate facilities in classrooms</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Unavailability of library</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Poor library facilities and stock</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Unavailability of laboratory</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Poor laboratory facilities and equipment</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Inadequate supply of books and stationery</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Non-involvement of children in the management and decision-making of school policies</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Impersonal school curriculum</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Table 5.7 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Order of precedence</th>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>The &quot;sword&quot; of not being given a second chance of repeating Std. 10</td>
<td>4.00</td>
</tr>
<tr>
<td>37</td>
<td>1 1 1 12 1 11</td>
<td>Tension accompanying the late release of Matric Examination results by the D.E.T.</td>
<td>4.00</td>
</tr>
<tr>
<td>43</td>
<td>1 22 7 20 1</td>
<td>Unavailability of a News Letter informing parents and the public about curricular activities in the school</td>
<td>4.00</td>
</tr>
<tr>
<td>32</td>
<td>1 17 4 20 1</td>
<td>No Educational Assistance Services in the school</td>
<td>4.00</td>
</tr>
<tr>
<td>38</td>
<td>14 1 39 38 37</td>
<td>Compulsory three languages learning</td>
<td>3.96</td>
</tr>
<tr>
<td>44</td>
<td>15 35 14 1 12</td>
<td>Uninvolvement of the local community in the school</td>
<td>3.95</td>
</tr>
<tr>
<td>21</td>
<td>15 1 25 1 16</td>
<td>Unwritten and inconsistent school policy and regulations</td>
<td>3.95</td>
</tr>
<tr>
<td>18</td>
<td>15 38 28 36 41</td>
<td>Unavailability of sports grounds</td>
<td>3.95</td>
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</table>

Table 5.7 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Order of precedence</th>
<th>Factors</th>
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<tbody>
<tr>
<td></td>
<td>Standard 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>15 1 1 1 21</td>
<td>Classes too crowded 3.95 4.00 4.00 4.00 3.92</td>
</tr>
<tr>
<td>30</td>
<td>19 1 9 31 32</td>
<td>Compulsory, exorbitant and unaffordable school fund 3.94 4.00 3.79 3.70 3.59</td>
</tr>
<tr>
<td>41</td>
<td>20 23 22 1 25</td>
<td>Subjects offered at the wrong time of day 3.93 3.74 3.46 4.00 3.78</td>
</tr>
<tr>
<td>34</td>
<td>20 36 20 1 1</td>
<td>Too many unscheduled tests within a short space of time 3.93 3.46 3.51 4.00 4.00</td>
</tr>
<tr>
<td>33.1</td>
<td>20 28 33 1 1</td>
<td>Tedious compulsory cutting of grass 3.93 3.68 3.09 4.00 4.00</td>
</tr>
<tr>
<td>40</td>
<td>23 18 13 10</td>
<td>Teacher carrying a cane during lesson periods to threaten pupils for positive response 3.91 3.89 3.71 4.00 3.97</td>
</tr>
<tr>
<td>28</td>
<td>24 39 38 35 38</td>
<td>Too many double periods in a day 3.89 3.13 2.82 3.60 3.24</td>
</tr>
<tr>
<td>33.3</td>
<td>25 23 35 1 1</td>
<td>Tedious compulsory cleaning of toilets 3.87 3.74 3.02 4.00 4.00</td>
</tr>
<tr>
<td>39</td>
<td>25 21 8 1 1</td>
<td>Brutal and unjustified corporal punishment 3.87 3.84 3.84 4.00 4.00</td>
</tr>
</tbody>
</table>

Table 5.7 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Order of precedence</th>
<th>Factors</th>
<th>Mean</th>
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<td>Standard</td>
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<td></td>
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<tr>
<td></td>
<td>6 7 8 9 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>27 1 14 29 1</td>
<td>Too much unscheduled written work and too many assignments each day from different subject teachers given as homework</td>
<td>3.82</td>
</tr>
<tr>
<td>2</td>
<td>27 23 31 37 34</td>
<td>Negative attitude of some teachers towards children and teaching</td>
<td>3.82</td>
</tr>
<tr>
<td>29</td>
<td>29 19 36 30 35</td>
<td>Lengthy teaching and learning hours in the school</td>
<td>3.80</td>
</tr>
<tr>
<td>8</td>
<td>30 40 21 20 21</td>
<td>Incidents inspired by radical pupil leadership</td>
<td>3.79</td>
</tr>
<tr>
<td>20</td>
<td>30 42 14 41 31</td>
<td>Outdated or old fashioned teaching methods</td>
<td>3.79</td>
</tr>
<tr>
<td>3</td>
<td>32 27 24 28 23</td>
<td>Professionally unqualified teachers</td>
<td>3.77</td>
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<tr>
<td>27</td>
<td>33 33 37 1 24</td>
<td>Impersonal atmosphere at school</td>
<td>3.74</td>
</tr>
<tr>
<td>31</td>
<td>34 23 34 34 28</td>
<td>Audited financial statements not furnished to parents and/or pupils</td>
<td>3.72</td>
</tr>
<tr>
<td>33.2</td>
<td>35 19 43 1 1</td>
<td>Tedious compulsory planting of new grass</td>
<td>3.71</td>
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</tbody>
</table>

Table 5.7 cont...
### Table 5.7 Cont.

<table>
<thead>
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<th>Variable</th>
<th>Order of precedence</th>
<th>Factors</th>
<th>Mean</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>6 7 8 9 10</td>
<td></td>
<td>6 7 8 9 10</td>
</tr>
<tr>
<td>5</td>
<td>36 31 27 26 29</td>
<td>Too lenient, permissive and uncaring principal and teachers</td>
<td>3.70 3.62 3.31 3.83 3.71</td>
</tr>
<tr>
<td>42</td>
<td>37 29 29 1 26</td>
<td>Neglect of Parents' Days</td>
<td>3.68 3.63 3.29 4.00 3.76</td>
</tr>
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<td>33.4</td>
<td>38 29 44 1 1</td>
<td>Tedious compulsory cleaning of offices</td>
<td>3.64 3.63 2.48 4.00 4.00</td>
</tr>
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<td>6</td>
<td>38 34 30 23 12</td>
<td>Understaffing</td>
<td>3.64 3.51 3.26 3.91 3.96</td>
</tr>
<tr>
<td>4</td>
<td>40 44 32 33 27</td>
<td>Unapproachable, authoritative and too strict principal and teachers</td>
<td>3.60 2.70 3.14 3.66 3.74</td>
</tr>
<tr>
<td>26</td>
<td>41 37 40 1 16</td>
<td>Neglect of certain subjects</td>
<td>3.56 3.31 2.72 4.00 3.95</td>
</tr>
<tr>
<td>11</td>
<td>42 32 26 44 39</td>
<td>Too much emphasis on the theoretical usage of the Second Languages</td>
<td>3.40 3.58 3.32 3.03 3.21</td>
</tr>
<tr>
<td>1</td>
<td>43 43 41 39 42</td>
<td>Inability of some teachers to reach the child's level, e.g. gap in communication</td>
<td>3.02 2.84 2.66 3.41 2.98</td>
</tr>
<tr>
<td>9</td>
<td>44 46 45 46 45</td>
<td>Having to conform to too young or too old children</td>
<td>2.84 1.87 2.46 2.56 2.25</td>
</tr>
<tr>
<td>Variable</td>
<td>Order of precedence</td>
<td>Factors</td>
<td>Mean Standard</td>
</tr>
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<td>---------------------</td>
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<tr>
<td>24</td>
<td>47</td>
<td>47</td>
<td>47</td>
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</table>
5.9.1.1 Analysis

- In table 5.7 variables 7, 12, 14, 15, 16, 22, 23, 36, and 37 were given the same highest mean score of 4.00 by both standards 6 and 7 respondents, which is an indication that the following factors were regarded by both groups to be most stressful:
  
  * lack of adequately qualified teachers in Physical Science, Mathematics and General Science;
  
  * inadequate facilities in classrooms;
  
  * unavailability of library;
  
  * poor library facilities and stock;
  
  * unavailability of laboratory;
  
  * non-involvement of children in the management and decision-making of school policies;
  
  * impersonal school curriculum;
  
  * the "sword" of not being given a second chance of repeating Std. 10; and
  
  * tension accompanying the late release of Matric Examination results by the Department of Education and Training.

- Std. 7 respondents further gave variables 38 and 30 the highest mean score of 4.00 which shows that the following factors were further regarded by this group to be most stressful:
  
  * compulsory three languages learning; and
  
  * compulsory, exorbitant and unaffordable school fund.

- Std. 8 respondents, together with standards 6 and 7, gave variable 12 the highest mean score of 4.00 which points out that a factor like the following is debilitating them:
  
  * inadequacy of facilities in classrooms.
Like Std.s 7 and 9 respondents, the Std. 8 respondents further gave variable 13 the highest mean score of 4,00 which indicates that:

* too crowded classes, is a stressor to them.

The Std. 9 respondents, together with standards 6 and 7, gave variables 15, 22 and 37 the same highest mean score (see paragraph 1 above). Like the Std. 6 respondents, they gave variables 17 and 19 the highest mean score of 4,00 which indicates that the following factors cause for both groups most stress:

* poor laboratory facilities and equipment;
* inadequate supply of books and stationery.

Together with Std. 7, they gave variable 21 the highest mean score of 4,00, which shows that:

* unwritten and consistent school policy and regulations, is stressful to both groups.

The Std. 9 respondents further gave variables 44, 41, 40, 27, 42 and 26 the highest mean score of 4,00 which is an indication that they uniquely as a group regard the following factors to be most stressful:

* uninvolvement of the local community in the school;
* subjects offered at the wrong time of day;
* teacher carrying a cane during lesson periods to threaten pupils for positive response;
* impersonal atmosphere at school;
* neglect of Parents' Days; and
* neglect of certain subjects.

The Std. 10 respondents, together with Std. 9 respondents, gave variables 34, 33.1, 33.3, 39, 33.2 and 33.4 the highest mean score of 4,00 which is an indication that the following factors were regarded by both groups to be stressful:

* too many unscheduled tests within a short space of time;
* tedious compulsory cutting of grass;
* tedious compulsory cleaning of toilets;
* brutal and unjustified corporal punishment;
* tedious compulsory planting of new grass; and
* tedious compulsory cleaning of offices.

The Std. 10 respondents, together with Std. 6 respondents, further gave variables 43 and 32 the highest mean score of 4,00 which is an indication that factors like:

* unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school; and
* no Educational Assistance Services in the school, to be stressful.

It is interesting to note that, against the expectations of the researcher, factors like the "sword" of not being given a second chance of repeating Std. 10; and tension accompanying the late release of Matric Examination results by the Department of Education and Training, were given the highest mean score of 4,00 by standards 6 and 7; whilst the standard 10 respondents gave them the mean scores of 3,57 and 3,96.

5.9.1.2 Findings

From table 5.7 it can be deduced that standards 6, 7 and 9 are experiencing a higher degree of stress than standards 8 and 10 because of many stressors that they stated. Stressors which seem to be responsible for most of investigation group stress are matters whereby they have no say because they concern the extent; organisation; management; administration; and teaching of subjects in the school.

The unavailability and poor educational facilities like libraries and stock could be factors that cause a poor vocabulary; and grammar, comprehension and study methods difficulties for the investigation group in question (cf. paragraph 5.6; table 5.4) and could consequently lead to aphasia; and metacognitive, self-regulated and learning strategies problems (cf. paragraphs 2.5.1.6; 5.6.2; table 5.4).
The fact that both standards 6 and 7 rated the lack of adequately qualified teachers in Physical Science, Mathematics and General Science on the top range order could be a token of a higher stress that these pupils are experiencing because this factor has a great influence on their academic achievement and vocational choice. This factor could also be the cause of the poor vocational orientation that 76.7% of the investigation group is experiencing. Coupled with this factor, is the unavailability of laboratories in most secondary schools which could hamper their learning of Physical Science and General Science and could subsequently have an impact on their academic achievement, especially in natural sciences subjects.

5.9.2 Stressors in 12 to 20 year olds and older adolescents
TABLE 5.8: Stress factors in 12-14 year olds, 15-17 year olds, 18-19 year olds, 20 year olds and older adolescents in KwaZulu Secondary Schools arranged according to mean order of precedence.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Order of precedence</th>
<th>Mean</th>
<th>Factors</th>
<th>12-14</th>
<th>15-17</th>
<th>18-19</th>
<th>20-older</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1 1 14 16</td>
<td>4.00</td>
<td>Inadequate facilities in classrooms</td>
<td>4.00</td>
<td>3.83</td>
<td>3.94</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1 5 5 1</td>
<td>4.00</td>
<td>Classes too crowded</td>
<td>3.97</td>
<td>3.95</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1 18 43 44</td>
<td>4.00</td>
<td>Unavailability of library</td>
<td>3.73</td>
<td>2.92</td>
<td>2.58</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1 3 2 1</td>
<td>4.00</td>
<td>Poor library facilities and stock</td>
<td>3.99</td>
<td>3.97</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1 19 41 43</td>
<td>4.00</td>
<td>Unavailability of laboratory</td>
<td>3.72</td>
<td>2.96</td>
<td>2.67</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>1 7 4 1</td>
<td>4.00</td>
<td>Poor laboratory facilities and equipment</td>
<td>3.96</td>
<td>3.96</td>
<td>4.00</td>
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Table 5.8 cont...
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<tr>
<td>37</td>
<td>1</td>
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<td>Tension accompanying the late release of Matric Examination results by the D.E.T.</td>
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<td>Unavailability of sports grounds</td>
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<td>14</td>
<td>11</td>
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<td>Unavailability of a News Letter informing parents and the public about curricular activities in the school</td>
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<td>Unwritten and inconsistent school policy and regulations</td>
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<td>Compulsory, exorbitant and unaffordable school fund</td>
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<td></td>
<td>Tedious compulsory planting of new grass</td>
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<tr>
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<tr>
<td></td>
<td>Too much unscheduled written work and too many assignments each day from different subject teachers given as homework</td>
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<tr>
<td>3</td>
<td>31</td>
<td>23</td>
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<tr>
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<td>23</td>
<td>18</td>
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<td></td>
<td>Professionally unqualified teachers</td>
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<td>31</td>
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<tr>
<td>32</td>
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<td>35</td>
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<td></td>
<td>Outdated or old fashioned teaching methods</td>
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<td>33</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Negative attitude of some teachers towards children and teaching</td>
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<tr>
<td>34</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Lengthy teaching and learning hours in the school</td>
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<td>31</td>
<td>35</td>
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</tr>
<tr>
<td>35</td>
<td>33</td>
<td>30</td>
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<tr>
<td></td>
<td>Audited financial statements not furnished to parents and/or pupils</td>
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<td>33.4</td>
<td>36</td>
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</tr>
<tr>
<td>36</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Tedious compulsory cleaning of offices</td>
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<tr>
<td>27</td>
<td>37</td>
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<td>37</td>
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<td>Impersonal atmosphere at school</td>
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<td>42</td>
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<tr>
<td>38</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Neglect of Parents' Days</td>
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Table 5.8 cont...
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<th>Mean 15-17</th>
<th>Mean 18-19</th>
<th>Mean 20-older</th>
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<td>6</td>
<td>39 26 19 24</td>
<td>Understaffing</td>
<td>3.27</td>
<td>3.58</td>
<td>3.72</td>
<td>3.77</td>
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<tr>
<td>26</td>
<td>40 41 29 21</td>
<td>Neglect of certain subjects</td>
<td>3.25</td>
<td>3.17</td>
<td>3.55</td>
<td>3.86</td>
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<tr>
<td>4</td>
<td>41 38 28 33</td>
<td>Unapproachable, authoritative and too strict principal and teachers</td>
<td>3.20</td>
<td>3.27</td>
<td>3.57</td>
<td>3.42</td>
</tr>
<tr>
<td>11</td>
<td>42 21 40 39</td>
<td>Too much emphasis on the theoretical usage of the Second Languages</td>
<td>3.03</td>
<td>3.69</td>
<td>2.97</td>
<td>3.31</td>
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<tr>
<td>25</td>
<td>43 44 45 45</td>
<td>Too many unscheduled extracurricular activities at the expense of intracurricular activities</td>
<td>2.60</td>
<td>2.59</td>
<td>2.90</td>
<td>2.43</td>
</tr>
<tr>
<td>10</td>
<td>43 46 46 47</td>
<td>Having no friends</td>
<td>2.60</td>
<td>2.29</td>
<td>2.81</td>
<td>2.11</td>
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<tr>
<td>1</td>
<td>45 43 37 42</td>
<td>Inability of some teachers to reach the child's level, e.g. gap in communication</td>
<td>2.50</td>
<td>3.02</td>
<td>3.11</td>
<td>2.76</td>
</tr>
<tr>
<td>9</td>
<td>46 45 47 46</td>
<td>Having to conform to too young or too old children</td>
<td>2.25</td>
<td>2.48</td>
<td>2.47</td>
<td>2.40</td>
</tr>
<tr>
<td>24</td>
<td>47 47 44 35</td>
<td>Too many intracurricular activities at the expense of extracurricular activities</td>
<td>1.89</td>
<td>2.18</td>
<td>2.91</td>
<td>3.42</td>
</tr>
</tbody>
</table>
## 5.9.2.1 Analysis

- In table 5.8 the respondents who are 12 to 14 years old gave variables 12, 13, 14, 15, 16, 17, 19, 22, 23, 32 and 37 the highest mean score of 4.00 which is an indication that they regard the following factors to be most stressful:
  - inadequate facilities in classrooms;
  - classes too crowded;
  - unavailability of library;
  - poor library facilities and stock;
  - unavailability of laboratory;
  - poor laboratory facilities and equipment;
  - inadequate supply of books and stationery;
  - non-involvement of children in the management and decision-making of school policies;
  - impersonal school curriculum;
  - no Educational Assistance Services in the school;
  - the "sword" of not being given a second chance of repeating Std. 10; and
  - tension accompanying the late release of Matric Examination results by the Department of Education and Training.

- The respondents who are 15 to 17 years old, together with the respondents who are 12 to 14 years old, gave variables 12 and 22 the same highest mean score of 4.00 which indicates that they also deem both these factors as the most stressors.

- The respondents who are 18 to 19 years old, together with those who are 12 to 14 years old, gave variable 32 the same highest mean score of 4.00 which shows that they also regard this factor to be most stressful.
The respondents who are 20 years old and older, together with the 12 to 14 years old respondents, gave variables 13, 15, 17, 23 and 37 the same highest mean score, which indicates that they also deem these factors to have a debilitating effect on their lives. They further gave variables 44, 33.1, 39 and 35 the highest mean score of 4.00 which indicates that they, as a group, uniquely regard the following factors to be most stressful:

* uninvolved of the local community in the school;
* tedious compulsory cutting of grass;
* brutal and unjustified corporal punishment; and
* too much unscheduled written work and too many assignments each day from different subject teachers given as homework.

5.9.2.2 Findings

From table 5.8 it can be deduced that pupils who are 12 to 14 years old and those who are 20 years and older are experiencing a greater degree of stress than the 15 to 17 year olds and 18 to 19 year olds. The reason for this could be the fact that the Blacks educational system has not yet provided for the differentiated secondary school phases clearly making provision for the Junior Secondary school phase, to cater for the education of the 12 to 14 year olds; and the Senior Secondary school phase, to cater for the 15 to 18 year olds. The 20 year olds and older pupils, who can still be found in great numbers in Black secondary schools because of various reasons, could be experiencing authority and disciplinary procedures problems because of their adult ages which might be close to that of their teachers; which could be the reason why they have problems with factors like impersonal school curriculum; tension accompanying the late release of Matric Examination results by the Department of Education and Training; cutting of grass in school premises; brutal and unjustified corporal punishment; and too much unscheduled written work and too many assignments each day from different subject teachers given as homework (cf. paragraph 5.9.2.1).

5.9.3 Stressors in pupils in schools with 300 and fewer, 301-600, 600-1,000 and 1,001 and above enrollments
TABLE 5.9: Stress factors among pupils in KwaZulu Secondary Schools with 300 and fewer pupils, 301-600 pupils, 600-1 000 pupils and 1 001 and over pupils enrollments arranged according to mean order or precedence.

<table>
<thead>
<tr>
<th>Order of precedence</th>
<th>Pupils</th>
<th>Factors</th>
<th>Mean</th>
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<tr>
<td>Variable</td>
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<td>301-600 600-1 000 1 001-over</td>
<td>300-fewer</td>
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<tr>
<td></td>
<td>N=526</td>
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<td>301-600</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>600-1 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 001-over</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>25 28 33 Lack of adequately qualified teachers in Physical Science, Mathematics and General Science</td>
<td>4,00 3,96 3,85 3,53</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>22 35 44 Too much emphasis on the theoretical usage of the Second Languages</td>
<td>4,00 3,82 3,77 2,69</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>1 28 15 Inadequate facilities in classrooms</td>
<td>4,00 4,00 3,85 3,87</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>8 28 5 Classes too crowded</td>
<td>4,00 3,97 3,85 3,98</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>5 28 1 Poor library facilities and stock</td>
<td>4,00 3,99 3,85 4,00</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>5 33 45 Unavailability of laboratory</td>
<td>4,00 3,99 3,81 2,60</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>11 35 1 Poor laboratory facilities and equipment</td>
<td>4,00 3,95 3,77 4,00</td>
</tr>
<tr>
<td>21</td>
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<td>44 28 1 Unwritten and inconsistent school policy and regulations</td>
<td>4,00 3,95 3,77 4,00</td>
</tr>
<tr>
<td>Variable</td>
<td>Order of precedence</td>
<td>Factors</td>
<td>Mean</td>
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<td>300-fewer</td>
<td>301-600</td>
<td>600-1000</td>
</tr>
<tr>
<td>22</td>
<td>1 1 1 21</td>
<td>Non-involvement of children in the management and decision-making of school policies</td>
<td>4,00 4,00 4,00 3,82</td>
</tr>
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<td>23</td>
<td>1 1 23 26</td>
<td>Impersonal school curriculum</td>
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<td>32</td>
<td>1 7 1 8</td>
<td>No Educational Assistance Services in the school</td>
<td>4,00 3,98 4,00 3,96</td>
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<td>36</td>
<td>1 16 1 37</td>
<td>The &quot;sword&quot; of not being given a second chance of repeating Std. 10</td>
<td>4,00 3,89 4,00 3,29</td>
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<tr>
<td>37</td>
<td>1 12 1 18</td>
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<td>4,00 3,94 4,00 3,85</td>
</tr>
<tr>
<td>43</td>
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<td>Unavailability of a News Letter informing parents and the public about curricular activities in the school</td>
<td>4,00 3,86 4,00 3,93</td>
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<td>44</td>
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<td>38</td>
<td>16 42 23 40</td>
<td>Compulsory three languages learning</td>
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Table 5.9 cont...
### Table 5.9 cont...

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<td>Pupils</td>
<td></td>
</tr>
<tr>
<td></td>
<td>301- 600</td>
<td></td>
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<td>600- 1 000 over</td>
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<td>1 001- over</td>
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<td>1</td>
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<td>33.2</td>
<td>37</td>
<td>31</td>
<td>1</td>
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<td>6</td>
<td>40</td>
<td>21</td>
<td>1</td>
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<tr>
<td>33.4</td>
<td>41</td>
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<td>1</td>
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<td>300-fewer</td>
<td>301-600</td>
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<td>46</td>
<td>40</td>
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<tr>
<td>10</td>
<td>47</td>
<td>45</td>
</tr>
</tbody>
</table>
In table 5.9 the respondents who are in schools with 300 and fewer enrollment of pupils gave variables 7, 11, 12, 13, 15, 16, 17, 21, 22, 23, 32, 36, 37, 43 and 44 the highest mean score of 4.00 which is an indication that they regard the following factors to be most stressful:

* lack of adequately qualified teachers in Physical Science, Mathematics and General Science;

* too much emphasis on the theoretical usage of the Second Languages;

* inadequate facilities in classrooms;

* classes too crowded;

* poor library facilities and stock;

* unavailability of laboratory;

* poor laboratory facilities and equipment;

* unwritten and inconsistent school policy and regulations;

* non-involvement of children in the management and decision-making of school policies;

* impersonal school curriculum;

* no Educational Assistance Services in the school;

* the "sword" of not being given a second chance of repeating Std. 10;

* tension accompanying the late release of Matric Examination results by the Department of Education and Training;

* unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school; and

* uninvolvement of the local community in the school.

The respondents who are in schools with 301 to 600 enrollment of pupils, together with those in schools with 300 and fewer enrollment of pupils, gave variables 12 and 33 the same highest mean score of 4.00 which indicates that...
they also regard these factors to be most stressful. The respondents who are in schools with 301 to 600 enrollment of pupils further gave variable 20 the highest mean score of 4.00 which indicates that they, as a group, uniquely regard the following factor to be most stressful:

* outdated or old fashioned teaching methods.

The respondents who are in schools with 600 to 1000 enrollment of pupils, together with those who are in schools with 300 and fewer enrollment of pupils, gave variables 32, 36, 37, and 43 the same highest mean score of 4.00. Together with respondents who are in schools with 300 and fewer enrollment of pupils and those in schools with 301 to 600 enrollment of pupils, they gave variable 22 the same highest mean score of 4.00 which is an indication that these factors affect them to the same degree and intensity. They further gave variables 30, 35, 40, 39, 33.1, 2, 5, 3, 33.3, 41, 31, 33.2, 27, 42, 6, 33.4 and 26 the highest mean score of 4.00 which is an indication that the following factors cause them most stress:

* compulsory, exorbitant and unaffordable school fund;

* too much unscheduled written work and too many assignment each day from different subject teachers given as homework;

* teacher carrying a cane during lesson periods to threaten pupils for positive response;

* brutal and unjustified corporal punishment;

* tedious compulsory cutting of grass;

* negative attitude of some teachers towards children and teaching;

* too lenient, permissive and uncaring principal and teachers;

* professionally unqualified teachers;

* tedious compulsory cleaning of toilets;

* subjects offered at the wrong time of day;

* audited financial statement not furnished to parents and/or pupils;

* tedious compulsory planting of green grass;

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impersonal atmosphere at school;  
* neglect of Parents' Days;  
* understaffing;  
* tedious compulsory cleaning of offices; and  
* neglect of certain subjects.

The respondents who are in schools with 1 001 and over enrollment of pupils, together with those who are in schools with 300 and less enrollment of pupils, gave variables 15, 17 and 21 the same highest mean score of 4.00 which indicates that these factors cause them, as well, most stress. Together with the respondents who are in schools with 600 to 1 000 enrollment of pupils, the respondents who are in schools with 1 001 enrollment of pupils gave variable 39 the same highest mean score of 4.00 which is an indication that this factor also causes them most stress to the same degree and intensity.

5.9.3.2 Findings

From table 5.9 it could be deduced that pupils in schools with 600 to 1 000 enrollment are experiencing more stress than pupils in secondary schools with 301 to 599 enrollment. The reason could be that schools with big enrollments are characterized with understaffing problems (cf. paragraph 5.9.3.1; table 5.9); poor management strategies; and at times poor leadership styles, e.g. too lenient, permissive and uncaring principal and teachers (cf. paragraph 5.9.3.1).

In table 5.9 the factor of the non-involvement of children in the management and decision-making of school policies seems to be common among most respondents (cf. table 5.9; paragraph 5.9.3.1) which could be a token of the existence of educational repression in the schools which are attended by the investigation group where pupils are not democratically involved in the decision-making of matters that affect them directly like school policies, extramural activities; and curriculum design. This could be one reason why many pupils in schools with 600 to 1 000 enrollment rated the following factors to be particularly most stressful impersonal atmosphere at school; subjects offered at the wrong time of day; and compulsory cleaning of toilets, cutting of grass and cleaning of offices.

5.9.4 Stress factors among adolescents in township and rural areas
### TABLE 5.10: Stress factors among township and rural areas adolescents in KwaZulu Secondary Schools arranged according to mean order of precedence.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Order of precedence</th>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Township Adolescents</td>
<td>Rural Adolescents</td>
<td>No Educational Assistance Services in the school</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
<td>9</td>
<td>No Educational Assistance Services in the school</td>
</tr>
<tr>
<td>39</td>
<td>1</td>
<td>16</td>
<td>Brutal and unjustified corporal punishment</td>
</tr>
<tr>
<td>43</td>
<td>1</td>
<td>14</td>
<td>Unavailability of a News Letter informing parents and the public about curricular activities in the school</td>
</tr>
<tr>
<td>40</td>
<td>4</td>
<td>20</td>
<td>Teacher carrying a cane during lesson periods to threaten pupils for positive response</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>3</td>
<td>Poor library facilities and stock</td>
</tr>
<tr>
<td>21</td>
<td>6</td>
<td>28</td>
<td>Unwritten and inconsistent school policy and regulations</td>
</tr>
<tr>
<td>17</td>
<td>7</td>
<td>5</td>
<td>Poor laboratory facilities and equipment</td>
</tr>
<tr>
<td>19</td>
<td>7</td>
<td>8</td>
<td>Inadequate supply of books and stationery</td>
</tr>
</tbody>
</table>

Table 5.10 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Township Adolescents</th>
<th>Rural Adolescents</th>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>9</td>
<td>38</td>
<td>Too lenient, permissive and uncaring principal and teachers</td>
<td>3,95</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,38</td>
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<tr>
<td>3</td>
<td>9</td>
<td>32</td>
<td>Professionally unqualified teachers</td>
<td>3,95</td>
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<td>3,52</td>
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<tr>
<td>6</td>
<td>9</td>
<td>37</td>
<td>Understaffing</td>
<td>3,95</td>
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<td></td>
<td>3,44</td>
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<tr>
<td>13</td>
<td>9</td>
<td>5</td>
<td>Classes too crowded</td>
<td>3,95</td>
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<td></td>
<td></td>
<td>3,98</td>
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<tr>
<td>27</td>
<td>13</td>
<td>40</td>
<td>Impersonal atmosphere at school</td>
<td>3,87</td>
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<td></td>
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<td>3,31</td>
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<tr>
<td>42</td>
<td>13</td>
<td>33</td>
<td>Neglect of Parents' Days</td>
<td>3,87</td>
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<td></td>
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<td>3,50</td>
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<td>26</td>
<td>15</td>
<td>41</td>
<td>Neglect of certain subjects</td>
<td>3,86</td>
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<td></td>
<td>3,19</td>
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<tr>
<td>44</td>
<td>15</td>
<td>21</td>
<td>Uninvolvement of the local community in the school</td>
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<td>Inadequate facilities in classrooms</td>
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<td></td>
<td>3,98</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>42</td>
<td>Unapproachable, authoritative and too strict principal and teachers</td>
<td>3,81</td>
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<td></td>
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<td></td>
<td></td>
<td>3,16</td>
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<td>Township Adolescents</td>
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<th>Mean Rural Adolescents</th>
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<td>33.2</td>
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<td>Tedious compulsory planting of new grass</td>
<td>3.54</td>
<td>3.48</td>
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<td>33.3</td>
<td>26 26</td>
<td>Tedious compulsory cleaning of toilets</td>
<td>3.54</td>
<td>3.70</td>
</tr>
<tr>
<td>33.4</td>
<td>26 39</td>
<td>Tedious compulsory cleaning of offices</td>
<td>3.54</td>
<td>3.36</td>
</tr>
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<td>23</td>
<td>30 1</td>
<td>Impersonal school curriculum</td>
<td>3.53</td>
<td>4.00</td>
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<td>8</td>
<td>31 21</td>
<td>Incidents inspired by radical pupil leadership</td>
<td>3.49</td>
<td>3.80</td>
</tr>
<tr>
<td>7</td>
<td>32 17</td>
<td>Lack of adequately qualified teachers in Physical Science, Mathematics and General Science</td>
<td>3.40</td>
<td>3.85</td>
</tr>
<tr>
<td>2</td>
<td>33 29</td>
<td>Negative attitude of some teachers towards children and teaching</td>
<td>3.31</td>
<td>3.60</td>
</tr>
<tr>
<td>29</td>
<td>34 29</td>
<td>Lengthy teaching and learning hours in the school</td>
<td>3.26</td>
<td>3.60</td>
</tr>
<tr>
<td>1</td>
<td>35 43</td>
<td>Inability of some teachers to reach the child's level, e.g. gap in communication</td>
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<td>2.78</td>
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<td>25</td>
<td>36 47</td>
<td>Too many unscheduled extracurricular activities at the expense of intracurricular activities</td>
<td>3.22</td>
<td>2.36</td>
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Table 5.10 cont...
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<td>9</td>
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<tr>
<td>9</td>
<td>47</td>
<td>44</td>
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</table>
5.9.4.1 Analysis

- The respondents from schools which are situated in townships gave variables 32, 39 and 43 the highest mean order of 4.00 which indicates that they regard the following factors to be most stressful in their schools:
  * no Educational Assistance Services in the school;
  * brutal and unjustified corporal punishment; and
  * unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school.

- The respondents from schools which are situated in rural areas gave variables 22 and 23 the highest mean score of 4.00 which indicates that they deem the following factors to be most stressors:
  * non-involvement of children in the management and decision-making of school policies; and
  * impersonal school curriculum.

5.9.4.2 Findings

It is interesting to note that pupils in the townships regard different stressors to be affecting them the most as compared to the pupils in rural areas. That pupils in townships regard the non-existence of Educational Assistance Services in the school; and unavailability of a News Letter informing parents and the public about the intracurricular and extracurricular activities in the school as most stressful factors prove that very little is done by the schools in this region to implement assistance programmes in helping the child in educational distress; and to involve parents of children in educational distress in planning for their child to be involved in the development of the individualized education programme, and have access to their child’s educational records (parental participation).

It is also interesting to note that pupils in schools situated in rural areas expressed their greatest concern on the factors of non-involvement of children in the management and decision-making of school policies and impersonal curriculum. This reveals that even pupils in rural areas, where the researcher thought that people are used to authoritarian and bureaucratic leadership styles, wish to see themselves democratically involved in the decision-making of school policies; curriculum and any other matters that affect them as students.

5.9.5 Stress factors among pupils with 26-35 pupils, 36-50 pupils, and 50 and above pupils per class
TABLE 5.11: Stress factors among KwaZulu Secondary School pupils with 26-35 pupils, 36-50 pupils, and 50 and above pupils per class.

<table>
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<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<td>Pupils per class</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26-35</td>
<td>36-50</td>
<td>50-above</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>20</td>
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<td>37</td>
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<tr>
<td>16</td>
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<td>1</td>
<td>41</td>
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<tr>
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<td>1</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>9</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

- Inadequate facilities in classrooms
- Classes too crowded
- Outdated or old fashioned teaching methods
- Non-involvement of children in the management and decision-making of school policies
- Impersonal school curriculum
- Poor library facilities and stock
- Unavailability of laboratory
- No Educational Assistance Services in the school
- Inadequate supply of books and stationery

N=526

Table 5.11 cont...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Pupils per class</th>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
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<td>8</td>
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<td>Incidents inspired by radical pupil leadership</td>
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<td>2</td>
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<td>Negative attitude of some teachers towards children and teaching</td>
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<td>Unavailability of sports grounds</td>
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<td>33.2</td>
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<td></td>
<td>Tedious compulsory planting of new grass</td>
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<td>3</td>
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<td>1</td>
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<td>35</td>
<td>1</td>
<td>36</td>
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<td></td>
<td>Tedious compulsory cleaning of offices</td>
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<td>29</td>
<td>36</td>
<td>1</td>
<td>19</td>
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<tr>
<td></td>
<td>Lengthy teaching and learning hours in the school</td>
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Table 5.11 cont...
\begin{table}
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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
\textbf{Variable} & \textbf{Order of precedence} & \textbf{Factors} & \textbf{Mean} \\
& 26-35 & 36-50 & 50-above & & & 26-35 & 36-50 & 50-above \\
\hline
1 & 37 & 41 & 44 & Inability of some teachers to reach the child's & 2.69 & 3.95 & 2.90 \\
& & & & level, e.g. gap in communication & & & \\
\hline
5 & 38 & 1 & 22 & Too lenient, permissive and uncaring principal & 2.60 & 4.00 & 3.68 \\
& & & & and teachers & & & \\
\hline
31 & 39 & 1 & 28 & Audited financial statements not furnished to & 2.47 & 4.00 & 3.60 \\
& & & & parents and/or pupils & & & \\
\hline
26 & 40 & 1 & 31 & Neglect of certain subjects & 2.41 & 4.00 & 3.52 \\
\hline
4 & 41 & 1 & 34 & Unapproachable, authoritative and too strict & 2.38 & 4.00 & 3.47 \\
& & & & principal and teachers & & & \\
\hline
27 & 42 & 1 & 23 & Impersonal atmosphere at school & 2.01 & 4.00 & 3.66 \\
\hline
21 & 43 & 1 & 5 & Unwritten and inconsistent school policy and & 2.00 & 4.00 & 3.97 \\
& & & & regulations & & & \\
\hline
28 & 43 & 1 & 39 & Too many double periods in a day & 2.00 & 4.00 & 3.37 \\
\hline
38 & 43 & 1 & 35 & Compulsory three languages learning & 2.00 & 4.00 & 3.45 \\
\hline
\end{tabular}
\caption{Table 5.11 cont...}
\end{table}
<table>
<thead>
<tr>
<th>Variable</th>
<th>Pupils per class</th>
<th>Factors</th>
<th>Mean</th>
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</table>
5.9.5.1 Analysis

- In table 5.11 the respondents in classes with 26 to 35 pupils gave variables 12, 13, 20, 22, and 23 the highest mean score of 4.00 which is an indication that they regard the following factors to be most stressful:
  * inadequate facilities in classrooms;
  * classes too crowded;
  * outdated or old fashioned teaching methods;
  * non-involvement of children in the management and decision-making of school policies; and
  * impersonal school curriculum.

- The respondents in classes with 36 to 50 pupils, together with those in classes with 26 to 35 pupils, gave variables 12, 13, 20, 22, and 23 the highest mean score of 4.00. They further gave variables 15, 16, 32, 19, 30, 17, 14, 37, 41, 39, 36, 43, 34, 33.1, 6, 33.3, 42, 7, 40, 44, 2, 18, 33.2, 3, 33.4, 29, 5, 31, 26, 4, 27, 21, 28, 38 and 24, which is an indication that they further regard the following factors to be most stressful:
  * poor library facilities and stock;
  * unavailability of laboratory;
  * no Educational Assistance Services in the school;
  * inadequate supply of books and stationery;
  * compulsory, exorbitant and unaffordable school fund;
  * poor laboratory facilities and equipment;
  * unavailability of library;
  * tension accompanying the late release of Matric Examination results by the Department of Education and Training;
  * subjects offered at the wrong time of day;
  * brutal and unjustified corporal punishment;
the "sword" of not being given a second chance of repeating Std. 10;

unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school; and

too much unscheduled written work and too many assignment each day from different subject teachers given as homework;

tedious compulsory cutting of grass;

understaffing;

tedious compulsory cleaning of offices;

neglect of Parents' Days;

lack of adequately qualified teachers in Physical Science, Mathematics and General Science;

teacher carrying a cane during lesson periods to threaten pupils for positive response;

uninvolvement of the local community in the school;

negative attitude of some teachers towards children and teaching;

unavailability of sports grounds;

tedious compulsory planting of new grass;

professionally unqualified teachers;

tedious compulsory cleaning of offices;

lengthy teaching and learning hours in the school;

too lenient, permissive and uncaring principal and teachers;

audited financial statement not furnished to parents and/or pupils;

neglect of certain subjects;

unapproachable, authoritative and too strict principal and teachers;

impersonal atmosphere at school;
unwritten and inconsistent school policy and regulations;
* too many double periods in a day;
* compulsory three languages learning; and
* too many intracurricular activities at the expense of extracurricular activities.

The respondents in classes with 50 and above enrolment of pupils, together with respondents in classes with 26 to 35 enrolment of pupils and those in classes with 36 to 50 enrolment of pupils, also gave variable 13 the same highest mean score of 4.00 which shows that they regard it to be causing them stress to the same degree and intensity.

5.9.5.2 Findings

From table 5.11 it could be deduced that pupils in classes with 36 to 50 enrolment are experiencing more stress than pupils in smaller classes. The majority of the pupils who participated in this research stated that their classes were too crowded (cf. table 5.11; variable 13). From the literature survey it was found that there is an association between crowding and psychological stress, which leads to an increase in both contagious and non-contagious illness. Evidence was also found that where children do not have adequate learning space their academic performance suffers; increased tension is observed; dissatisfaction is reported; and burnout which manifests in the form of emotional and/or physical exhaustion, inefficiency in learning and over depersonalization is observed (cf. paragraph 2.5.2).

It is interesting to note that some of these debilitating manifestations of the stress of overcrowdedness in classrooms were found among the investigation group of this research, e.g. physical exhaustions; tension headache; feeling of being inadequate as a person and so on (cf. paragraph 5.5.1).

5.10 DEDUCTIONS

In the analysis of the results of the empirical research of this project, it became clear that the adolescent in Black Secondary Schools in KwaZulu finds himself in a disadvantageous; pedagogically repressive; bureaucratic; and dysfunctional situation which makes it difficult, at times impossible, for him to unfold and actualise his latent potentialities to the fullest. It is on the strength of this premise that the following
deductions are made, in connection with the education of the targeted population of this research:

- The majority of pupils in KwaZulu Secondary Schools are experiencing poor vocational orientation, because in their schools very little or no School Guidance is rendered as a service to them because of the lack of posts for Guidance teachers; no provision for Heads of Departments to be responsible for Guidance Services in the schools; and the guardianship or "mentorship" system of guiding pupils is neglected (cf. paragraph 5.4.1; 5.4.2; 5.6.1; KwaZulu Annual Report, 1991:46).

- The majority of pupils in this region have limited cognitive potential which manifests in poor memory; poor attention span; tendencies of acting before thinking; reading difficulties; comprehension difficulties etc. and could have an impact in their efficiency in learning (cf. paragraph 5.5.1; 5.6.1). This could be attributable to poor library facilities and stock; outdated or old fashioned teaching methods; unavailability of library; inability of some teachers to reach the child's level, e.g. gap in communication; lack of adequately qualified teachers in Physical Science, Mathematics, and General Science; professionally unqualified teachers, etc. (cf. table 5.6; variables 15, 20, 16, 1, 7, 3).

- The majority of secondary school pupils in the KwaZulu region are manifesting certain psychosomatic-spiritual symptoms of educational distress like nervousness, anxiety and exertion; tension headache, being tired all the time; feelings of dodging certain lessons because of the unbearable incompetence of a subject teacher; feelings of cheating; depression; feelings of being inadequate as a person; and mental exhaustion, because of the following stated factors: inability of some teachers to reach the child's level, e.g. gap in communication; unapproachable, authoritative and too strict principal and teachers; too lenient, permissive and uncaring principal and teachers; impersonal atmosphere at school; negative attitude of some teachers towards children and teaching; incidents inspired by radical pupil leadership; unwritten and inconsistent school policy and regulations, and so on.

- The majority of the pupils cannot self-actualize and unfold their latent potentialities to the fullest because educational intervention programmes like: Panel for Investigation, Diagnosis, and Assistance (PIDA); in-school counselling; cooperative learning; teaching lessons on stress; and many other
Educational Assistance Services, are not constantly rendered to support and assist the child overcome educational distress (cf. table 5.5; paragraph 5.7.1).

Little or no provision is made for differentiated secondary school phases to cater for various age groups in Black education, e.g. to differentiate between a junior school phase; and a senior secondary school phase. It is for this reason that pupils who are 12 to 14 years old; and those who are 20 years old and older were, in this research, found to be experiencing more stress than pupils who are 15 to 17 years old; and those who are 18 to 19 years old.

The findings and deductions in this research clearly depict the stressful educational situation in Black Secondary Schools, especially those in KwaZulu, and a necessity for a comprehensive improvement of this debilitative educational situation should receive an immediate attention of the educational authorities if the academic achievement of black children is to be improved; and if the self-efficacy, metacognition, cognition, conation and affection aspects of these adolescents are to be developed to the fullest. In chapter 6 more attention will be given to this aspect in the form of recommendations.

5.11 CONCLUDING DEDUCTION

In this chapter the research results were presented. From these it is clear that children in black secondary schools experience stress but that various factors play a role.

Overcrowdedness, unavailability of educational facilities like libraries, laboratories, and sports grounds, the inadequate supply of books and stationary and so on cause a lot of stress for the children in secondary schools.

Tedious and compulsory manual labour like cutting grass, planting new grass, cleaning of toilets, and the cleaning of offices is regarded by the Std. 9 and 10 pupils as stressful.

The non-existence of educational auxiliary services like Guidance teachers, guardian teachers, and school councillors in the school is a cause of stress on its own, for the school fails to identify the child with a problem and to give the necessary assistance and guidance as early as possible.

It would appear that as far as psychological stress is concerned, the thinking process of the child is critical. Psychological stress, although honed from the crucible of child-school transaction, is nevertheless triggered by thoughts - thoughts about people, tasks,
and/or situations usually associated with either a retrospective or anticipated event in time. Once the child has decided that a personal threat is present in a particular transaction, the stress cycle leads to a predictable sequence of subjective (inner) and objective (public) experiences which, when dealt with by the child, will either lead to a feeling of success or failure on self-management and environmental (school) mastery. Obviously a succession of poorly managed encounters with psychological stress will have a serious impact on the developing sense of self of the child.

Long (1979:6-11) has written about this situation in some detail under the aegis of the conflict cycle. Essentially, it is his contention that behaviour is circular, e.g. that it has a pattern, and that children's behaviour is a result of their interaction with the environment. Further, it is posited that the stress cycle experienced by children will continue and most probably escalate unless some direct action is taken by the parties involved to interrupt the ongoing behavioural cycle in existence for a particular child. Figure 5.1 illustrates the nature of stress as Long conceives it for children in school.

FIGURE 5.1: The pupil's conflict cycle.

(Long, 1979:10)

In summary, Long's conflict cycle supports the following observations and findings of this research regarding childhood stress:

- school stress is inevitable, and children will invariably have feelings about what they are experiencing. Such stress comes about through the natural
vulnerability of the child to specific school demands and expectations, e.g. conflict, spirit-breaking, competition;

- children view the world through their own life histories. Upon entering school they already have developed a way of being in the world that is based in part on their innate biological determinants, primary need patterns, early and prolonged interpersonal encounters with family, friends, and neighbours, personality and temperament, and sense of self-identity;

- through the socialization process, children have learned to manage feelings through various coping and defending mechanisms;

- regression to more primitive, primary expressions of emotion will be observed in children’s behaviour under severely stressful circumstances;

- the reactions that children demonstrate to stress should be viewed as their best attempt at a solution to what is being experienced, and it may not allow them to get along harmoniously with adults, peers, learning, rules, and self;

- others in the school environment may not respond favourably to the ways children select for dealing with stressful school events; and

- children in trouble will be sensitive to such negative environmental feedback and may use such feedback to help bolster an already distorted image of what school and the people in it are like.

5.12 CONCLUSION

In this chapter attention was focused on the research results, and in CHAPTER SIX a conclusion of the research results and recommendations are given.
CHAPTER SIX

6. CONCLUSION, FINDINGS, DEDUCTIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In the concluding chapter of this dissertation, a summary of the five preceding chapters will be furnished. The problem, purpose and methods of the research will be briefly summarized, after which the results of the study will be synoptically discussed.

6.2 STATEMENT OF THE PROBLEM

(cf. paragraph 1.2)

Various researchers have defined adolescent stress as the experience by an adolescent of unpleasant emotions, such as tension, frustration, anxiety, anger and depression, resulting from aspects of the exploration of his world as a child. Prolonged adolescent stress results in adolescent burnout which is the syndrome primarily characterized by physical, emotional and attitudinal exhaustion.

Recent international and national research clearly demonstrates connections between adolescent stress and the school environment, e.g. researchers agree that public secondary schools have become virtual "hotbeds" of stress for children, viz, pressures manifest themselves in the following ways: conflicts and doubts concerning such matters as occupational choice; the choice of subjects; fear of not being able to achieve high enough and fast enough to compete with classmates or to please parents; competition is emphasized in all activities, i.e. on the playing field, in the school band, during gymnastics tryouts, and especially in the classroom, without any skills, abilities and experience to cope with competition. Many adolescents have not developed efficient coping skills for handling stressful situations, and they have not been trained to use their response systems to maximum efficiency. The result is the experiencing of "distress" - damaging or unpleasant stress.

Various researchers have observed that acute symptoms of adolescence stress manifest in the following: sleep disturbance, being tired all the time, separation fears, depression, school refusal, being physically run-down, loss of appetite, bowel/gastric/urinary upsets, dizziness, diarrhoea, frequent colds, headaches, sleeplessness, repeated descriptions of the experience or refusal to talk about it, war
games, cranky behaviour, greed and possessiveness, aggression, temper tantrums, withdrawal, sadness, resignation, self-injury and pretending to be an adult. If unchecked, these ailments may turn into ulcers, colitis or asthma, or they may cause loss of sexual interest. Once the pupil is both mentally and physically exhausted, he feels guilty, incompetent as a learner and finally inadequate as a person. If unchecked, these burnout symptoms can result in total emotional breakdown. Both South African and overseas researchers postulate that these symptoms usually fade quickly unless there has been a lack of support for the child or a lack of opportunity for discussion. It has also been discovered both internationally and nationally that physical illness is not the only domain where stress wreaks havoc; emotional health and mental functions such as memory, concentration, and creativity are also impaired. Behavioural efficiency, interpersonal relationships, and personal productivity are also limited.

6.3 **AIM OF THE RESEARCH**

(cf. paragraph 1.3)

In the light of the findings above, this research aimed to:

- determine factors causing stress among children in Black secondary schools in KwaZulu;
- highlight the effects of these stressful experiences on the physical domain, emotional health, mental functions, behavioural efficiency, interpersonal relationships, and personal productivity on these adolescents; and
- give some guidelines to ways of controlling, managing and combating stress among these children and in these schools.

The area of concentration was on the democratization of educational school practice through the conjoint behavioural consultation and involvement of parents, teachers, and where appropriate pupils in transforming public secondary schools in KwaZulu to stressfree educational learning and teaching situations.

6.4 **METHODS OF RESEARCH**

(cf. paragraph 1.5)
6.4.1 Literature study

South African and international literature was used to collect a body of facts in connection with stress, factors causing it, its effects on both the adolescent and the school's organization, and various ways in which pupils in secondary schools could be assisted in coping with stress. The following data were discovered through literature survey:

6.4.1.1 The nature, causes and effects of adolescent stress in secondary schools

(cf. chapter 2)

This chapter intended to analyze factors causing stress among adolescents in secondary schools and to identify the effects of stress on both the adolescent and the school. Stress was also defined. It was discovered that national and international researchers of the school setting have observed a relationship between stress and adolescent's perceptions of bureaucratic and decision-making aspects of schools; feelings of pressure in school; the uncaring school, teacher, administrator, community; ineffective management strategies; poor instruction; impersonal curriculum; medical impairments; and pupil and teacher emotional problem; in short, in all areas of the pupil's life (cf. paragraph 2.5).

Further explorations between the school environment and adolescence stress show that pupils with high stress have the following tendencies: they are involved in unsafe activities with their peers, either as victims or aggressors; felt teachers and other pupils did not respect them because they were not good pupils or were not members of status groups in the school; saw the school as unchanging; felt powerless to make changes they wanted; were hostile toward the pupil council; and were unfamiliar with and uninvolved in existing change mechanisms in the school; and disliked many school rules and felt that teachers judged and treated them more harshly than certain other pupils when rules were enforced.

Researchers further observed the following reactions of these adolescents: stealing, breaking school equipment, lying, cheating, deliberately getting into trouble to get sent out of class, giving up on themselves, being institutionalized for mental problems, skipping school, displaying elective mutism, exhibiting explosive behaviour toward peers, faking illness, threatening pregnancy, deliberately doing subpar work, using people to make themselves feel important, and burning and torturing animals (cf. paragraph 2.5).
The following child oriented stress factors, i.e. factors within the child himself, were found in both South African and international literature: feelings of inferiority; neurological impairments; language disorders like vocabulary, grammar, phonology or pragmatics; physical illness; developmental factors like beginning menstruation or nocturnal emissions; limited cognitive potential like inattention, impulsivity, hyperactivity, poor memory, learned helplessness or attribution and metacognitive problems in their learning; emotional immaturity and instability like depression, anxiety disorders, phobic disorders, disorders of impulsive control, somatoform disorders and schizophrenic disorders; poor self-concept and self-esteem which may be caused by mental health, interpersonal incompetence and social maladjustments, poor progress in school, low vocational aspirations and delinquency; and Type A Behaviour (TAB) children (cf. paragraphs 2.6.1.1 to 2.6.1.9).

A plethora of international and national literature exposed the following potential sources of interpersonal stress for adolescents in schools: teachers' leaderships style; social density; and group pressure e.g. study groups and peers (cf. paragraph 2.6.2).

School oriented stressors were found to be the following: repressive school structure and climate; test anxiety; overemphasis on academic success; schools reflect broader societal and parental demands; schools' reliance on individuals to manage increased demands; and treatment of adolescents as "Marginal People" (cf. paragraphs 2.6.3.1 to 2.6.3.6).

Both international and national literature gave the following effects of school stress on adolescents: poor health like angina, constipation, tension headache and allergies, and health impairing habits or behaviours like the use of palliatives, escapist eating, alcohol, drugs such as tobacco, tranquilizes, sleeping pills or analgesics; shattered self-concept; disconnectedness from teachers and parents; and linkage with substance abuse and antisocial behaviour (cf. paragraphs 2.7.1 to 2.7.4).

Various researchers agree that stress may cost the school organization the following: high drop-out rate; disruption of school programmes; and continual pupil absenteeism (cf. paragraphs 2.81 to 2.83).

6.4.1.2 The management techniques of controlling adolescence stress

(cf. chapter 3)

This chapter discussed the management techniques of controlling stress among adolescents and, possible stress relief programmes schools can use in helping their
pupils combat stress. Researchers agree that pedodiagnostication based on authentic conversation; systematic, unprejudiced, careful, objective, unhasty and purposeful educational observation; and immediate, spontaneous educational intuition are the effective act a teacher could utilize to identify a child in educational learning distress (cf. paragraphs 3.2.1.1 to 3.2.1.4).

Pedotherapeutic programmes in the school that could be utilized, according to most researchers, are the following: inculcation of self-awareness skills among adolescents; and teaching adolescents with Type A Behaviour strategies to manage their personality (cf. paragraphs 3.3.1.1 and 3.3.1.2).

Both international and national researchers propose the following school-oriented approaches of coping with stress: education/awareness building through assessment-focussed programmes, skill-building, and change in school setting; promotion of more productive peer interactions through cooperative learning, cross-age tutoring, and peer counselling; development of positive teacher-pupil relationships through Teacher Expectations for Pupil Achievement (TEPA) and teacher advisor/advisee programmes; provision of more meaningful in-school experiences that increase pupils' sense of belonging in the school like the Skills for Living course, community volunteer projects, curricular treatment of meaningful topics, and an appeals procedure; in-school counselling; pupil interviews; mainstreaming programme; and related services multidisciplinary team of professionals which should include a parent and, when appropriate, the pupil; and conjoint behavioural parent-teacher consultation (cf. paragraphs 3.3.2.8; 3.3.2.9; 3.3.2.10; 3.3.2.11; 3.3.2.12; 3.3.2.13; 3.3.2.14; 3.3.2.15; 3.3.2.17; 3.3.2.18).

6.4.2 Empirical research

The empirical research entailed the self-development of a stress inventory which was constructed and designed as an instrument to measure stress among children in KwaZulu within their unique circumstantial and cultural educational situatedness. Attention was paid to the purpose of the research (cf. paragraph 4.1).

6.4.2.1 Description of the measuring instrument and its application

(cf. chapter 4)

In chapter four, the research design is discussed. The stress inventory as the only tool of measuring stress among the investigation group in question is here scrutinized. The
composition of the stress inventory is discussed. The final stress inventory consisted of 73 items which were divided into graphical information, effects of stress, stress management, and stress factors (cf. appendix 1). The cluster-random sampling was applied of which the random sample size represents 25% of the secondary school population in the Ladysmith area. A 100% feedback of the responses based on the questions in the stress inventory was possible because the researcher personally visited the schools and the respondents filled in the stress inventory in his presence.

6.4.2.2 Results of the research

(cf. chapter 5)

The inventory responses were statistically analyzed by means of the SAS computer-programmes of the PU for CHE statistical consultation services. Frequency and mean scores were calculated. Frequency scores were used to analyze research data on biographical information, stated effects of stress on the respondents and stress management techniques stated by the respondents in the stress inventory, while mean scores were used for tabulating the stress factors indicated by the respondents in the stress inventory according to rank of order, i.e. from high to low mean scores (cf. tables 5.1; 5.2; 5.3; 5.4; 5.5; 5.6; 5.7; 5.8; 5.9; 5.10; 5.11).

Data in table 5.1 furnish the researcher with a profile of the investigation groups who filled in the stress inventory. The investigation consisted of more girls (56,1%) than boys (43,9%), and most of the respondents were from rural areas (63,1%). Of all the respondents, 50,1% indicated that their schools have enrollments of over 1 001 pupils. The majority of the respondents revealed that their classes had the size of over 51 pupils, which implies overcrowdedness. Of all the respondents, 47,5% followed a General Field of study (with Mathematics and General Science). The study also revealed that 79,3% of the respondents had three meals a day.

Data in table 5.2 reveal that 75,9% of the respondents indicated that they are/were responsible for the choice of the subject package they are following; the majority of the respondents revealed that their schools did not have Head of Departments responsible for Guidance Services in their schools, while all the respondents (100%) indicated that their schools did not have guardian teachers.

Data in table 5.3 give the profile of the effects of stress on the psychosomatic-spiritual domains of the respondents during the years 1991-1992. The majority of the respondents indicated that they had experienced nervousness, anxiety and exertion;
had suffered tension headache, being tired all the time; had had feelings of dodging certain lessons because of the unbearable incompetence of a subject teacher; had cheated; had experienced depression; felt inadequate as a person; while 79.3% had experienced mental exhaustion which they felt were caused by the stress they experienced in school. The study also revealed that most respondents were experiencing reading difficulties; experiencing poor memory; some had tendencies of acting before thinking, while most were experiencing physical exhaustion.

Table 5.4 gives the profile of language, metacomprehension, study methods and vocational deficiencies among the respondents. The majority of the respondents indicated that they had a poor vocabulary (94.5%), grammar difficulties (87.1%), comprehension difficulties (86.3%), study methods difficulties (82.5%), and poor vocational orientation.

Table 5.5 furnishes the profile of the various ways in which adolescents can be helped and supported to combat stress. All the respondents (100%) indicated that their schools did not have the following programmes:

- Panel for Identification, Diagnosis and Assistance (PIDA);
- in-school counselling;
- cooperative learning; and
- teaching lessons on stress.

The majority of the respondents indicated that they do not jog; eat healthy foods, like protein, milk, fruit and vegetables on daily basis, and that their schools do not give them freedom to talk out their problems.

Table 5.6 provides the profile of the stress factors. Firstly, the stress factors are arranged in order of precedence according to mean. The first 10 stressors which were indicated by the respondents are:

* poor library facilities and stock;
* no Educational Assistance Services in the school;
* classes too crowded;
* poor laboratory facilities and equipment;
* inadequate supply of books and stationary;

* inadequate facilities in classrooms;

* unavailability of a News Letter informing parents and the public about intracurricular and extracurricular activities in the school;

* non-involvement of children in the management and decision making of school policies;

* brutal and unjustified corporal punishment; and

* tension accompanying the late release of Matric Examination results by the Department of Education and Training.

Secondly, the stress factors as stated by boys and girls are compared with those of the whole group in order to find out which group experiences more stress. The results showed that all of the 10 above-mentioned factors cause a great deal of stress for the respondents of both sexes.

Table 5.7 provides the profile of the stress factors among various standards, i.e. 6, 7, 8, 9 and 10. Firstly the stress factors are arranged according to mean order of precedence, and secondly, the factors are compared. The results show that the following factors cause a great deal of stress for the adolescents in Std. 6 and 7:

- lack of adequately qualified teachers in Physical Science, Mathematics and General Science;

- inadequate facilities in classrooms;

- unavailability of library;

- poor library facilities and stock;

- unavailability of laboratory;

- non-involvement of children in the management and decision-making of school policies; and

- impersonal school curriculum.
Standards 9 and 10 regarded the following stressors as being most stressful:

* too many unscheduled tests within a short space of time;
* tedious compulsory cutting of grass;
* tedious compulsory cleaning of toilets;
* brutal and unjustified corporal punishment;
* tedious compulsory planting of new grass; and
* tedious compulsory cleaning of offices.

i. *Comparison of various groups of pupils*

With the aid of the biographical information the following various groups of pupils could be compared in order to find out which group among the respondents experiences more stress; and to identify and determine which of the stated stress factors in particular were regarded by each group as being most stressful for them. These stress factors were for each group arranged according to rank of order, i.e. from high to low mean scores (cf. tables 5.6; 5.7; 5.8; 5.9; 5.10; 5.11):

* boys and girls;
* standards 6, 7, 8, 9 and 10;
* various age groups ranging from 12-14 years of age, 15-17 years of age, 18-19 years of age, to 20 years of age and over;
* respondents from townships and those from rural areas;
* various sizes of school enrollments, e.g. school with 300 and fewer pupils, 301-600 pupils, 600-1 000 pupils and 1 001 pupils and over; and
* various number of pupils per class, viz., 26-35 pupils per class, 36-50 pupils per class, and 51 and over pupils in a class.
According to the results which were obtained, the following deductions could be made:

- Std.'s 6 and 7 experience more stress than Std.'s 8, 9 and 10 (cf. paragraph 5.10).

6.5 **DEDUCTION**

In this research project it became clear that many adolescents in secondary schools today, as before, still seem to be experiencing feelings of depression, anxiety, fear, insecurity, frustration, and a lack of self-worth. In short, they still seem to be engaged in a dehumanizing process perpetuated, in some cases, by the bridling or neglect of their emotional or spiritual needs as a consistent part of their schooling process. Certainly, the evidence of deep psychological hurt and discomfort manifested in tension headache, being tired all the time, and mental exhaustion is present. This could be a token of burnout which, if unchecked, could result in total emotional breakdown for these pupils. And, if the warnings of some writers in psychology are accurate - that modern pupils have less adaptive coping resources that their earlier counterparts a decade or two ago - the influence of the pain experienced by pupils targeted by this research may prove even more harmful to them over an extended period of time.

This research consistently found evidence that most schools in KwaZulu do not have Heads of Departments (H.O.D.'s) responsible for Guidance Services; no posts for School Guidance teachers; no books for Guidance teaching; no guardian teachers for continuing and supplementing the education of the home outside the home environment; no Panel for Identification, Diagnosis and Assistance (PIDA); no in-school counselling; no freedom for pupils to talk out their problems; an impersonal school curriculum; no Educational Assistance Services in the school; and non-involvement of children in the management and decision-making of school policies. All these seem to support the notion that many teachers are devoting considerably more time to educating the intellect of their pupils, while at the same time, seemingly spend less time or possibly neglect altogether the spirit and feelings of their pupils.

This research also found that many pupils in Black secondary schools are experiencing a poor vocabulary, grammar difficulties, and comprehension difficulties which are indications of learned helplessness, metacognition problems and limited cognitive potential.
From the literature and empirical research of this study it became clear that children with languages disorders have subtle difficulties that complicate their academic progress, for example, difficulty in accurately reading words out loud may be associated with an underlying problem in discriminating the sounds involved. In another case sparse written productivity may be related to poor oral vocabulary or a confused sense of the purpose of writing an essay or letter (cf. paragraph 2.5.1.3).

6.6 **RECOMMENDATIONS**

6.6.1 **Recommendations for educational practice**

The data-analysis led to the deductions which also have implications for educational practice. On the strength of the findings in this respect, the following recommendations are made:

- School Guidance and counselling are important aspects of school-going children's education and are essential for this transitional stage in South Africa. It should be promoted as follows:
  
  i. Various departments of Education which are custodians of Blacks education in South Africa, especially the KwaZulu Department of Education and Culture, should create posts for Guidance teachers in both primary and secondary schools and should provide textbooks for the subject. Heads of Departments posts for School Guidance Services should be created for all schools to coordinate and manage the teaching and learning of School Guidance.

  ii. The School Guidance programme should include teaching about stress. Here the child can be helped to recognize and investigate the nature of stress, can be encouraged to explore how stress affects him, and can also be helped to implement skills for stress reduction.

  iii. In-school counselling is a necessity in secondary schools, for councillors serve as consultants to teachers, parents, and administrators in assisting them to understand stress among children and make them aware of the indicators of stress. They can also conduct workshops for parents and teachers to provide training in managing stress for their children and classes.
iv. Guardianship (homeroom education) and mentorship systems should be practised in secondary schools. Guardianship should be regarded as an attempt by the school to continue and supplement the education of the home outside the home environment. It is necessary for the pupil to experience *the same measure of security and safety at school as he enjoys (or should enjoy) at home*. This feeling of safety is determined by the measure of pedagogic love, and interest and acceptance that he receives from his educators. It is also determined by the understanding with which the child is treated and the willingness with which he is helped. This implies that a true educational relationship between educator and pupil must be established and should be characterized by the following essential features: understanding, trust and authority. Guardianship should be the task of every teacher.

- Since it was discovered both in the literature and empirical research that pupils' perceptions of bureaucratic and decision-making aspects of schools cause stress for them, it is necessary to democratize education in secondary schools through the formation of non-statutory educational structures like Parents-Teachers-Students-Associations (PTSAs); Parents-Teachers-Associations (PTAs); Students' Representative Councils (SRCs) or Students Central Councils (SCCs) to ensure that parents, teachers and high school students are fully involved in decision-making activities like the drafting of school policies, school curriculum planning, the creation of communication mechanisms through which pupils can be able to voice their problems, and so on.

- Provision of Related Services Multidisciplinary Team (as propounded from the literature in chapter 3) is a necessity for Black secondary schools which are characterized, as was evident from the results of this research, by pupils with poor vocational orientation, experiencing study methods difficulties, a poor vocabulary, grammar difficulties, comprehension difficulties, poor attention span, reading difficulties, migraine headaches, difficulty in sitting still, acting before thinking, physical exhaustions, poor sight, poor hearing, indulging in the use of palliatives, alcohol, tobacco and so on.

- An improvement in communication between teachers, pupils and administrators seem to be essential.

- Secondary school authorities ought to establish early in the year with a stress inventory with the students what the sources of stress for them are. Students
must write down the stress factor(s) and indicate who of them are involved, how often the situation repeats itself and the measure of control he/she has over it. As soon as that has been done, steps can be taken to prevent and control the stress experienced by each student (Marais, 1989:47).

- Each week there should be opportunity on informal basis to discuss in an open conversation the important stressors with teachers and to find solutions. Students must feel free at any time to engage in conversations with teachers.

- Students should attempt to develop their own stress prevention plan. They should learn to adopt a culture of involvement in extracurricular activities, a healthy diet, enough sleep and physical exercise.

- Stress ought to be effectively counteracted by recreational exercises. Students must practise to learn as well as to recreate.

- Schools ought to work actively and collaboratively with parents. This will increase the potential for effective communication, constructive partnerships, and productive relationships between home and school.

### 6.6.2 Recommendations with reference to further research

- Little or no research has been done on how teacher stress can cause or exacerbate child stress in Blacks' secondary schools. Further research can thus serve as a vehicle for the teacher to more empathically understand child stress, and serve as a model against which to compare both symptoms and possible alternatives for solving this complex problem on behalf of children.

- Since this research concentrated on pupils in Black secondary schools in the KwaZulu Ladysmith area, further research ought to be undertaken on regional basis for all national groups.

- Research ought to be conducted on the influence of motivation, metacognition and learning strategies on stress management among children in secondary schools.

- Colleges of education ought to provide training in the pedodiagnostication and pedotherapy of pupils under stress.
6.7 CONCLUSION

In this research it became clear that pupils in Black secondary schools experience more stress because of many stressors and it stands to reason that teachers in these schools should be concerned about the whole child in their teaching. They should have concern for the mind, body, behaviour, feelings, emotions, and spirit of the child. They should have concern for both the inner and outer worlds of the child. They should also have concern for the child as a dynamic, growing, changing, developing human being and should find ways of facilitating this process for children.

This dissertation endeavoured in all modesty to show that the teacher is a central figure in developing and orchestrating a therapeutic, educational environment for children. The researcher has often felt that if teachers loved, cared for, respected, nurtured, tolerated, accepted, and were committed to children as if they were their own, there would be far fewer problems for children in school, and much more adaptive coping strength could be developed.
QUESTIONNAIRE TO PUPILS IN KWAZULU SECONDARY SCHOOLS

Dear Student

The purpose of this survey is to determine factors inducing stress and their effects on children in Black Secondary Schools in Kwazulu.

I would appreciate it if you were to complete the questionnaire.

I rely on your cooperation in this important matter.

A. DEMOGRAPHIC PARTICULARS

Furnish your answer by simply placing an "x" in the square opposite the relevant code number, for example:

I am

<table>
<thead>
<tr>
<th>Tall</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>x 2</td>
</tr>
</tbody>
</table>

1. Sex:

<table>
<thead>
<tr>
<th>Male</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Standard:

| 6 | 1 |
| 7 | 2 |
| 8 | 3 |
| 9 | 4 |
| 10 | 5 |
| 167 |   |
3. Age in completed years as at 1 May 1992:

- 12-14: 1
- 15-17: 2
- 18-19: 3
- 20 and older: 4

4. Highest standard of the school to which you are attached:

- Std's 6-8: 1
- Std's 6-10: 2
- Std's 8-10: 3
- Other (specify): 4

5. Area where school, to which you are attached is situated:

- Townships: 1
- Rural: 2
- Semi-rural: 3

6. Size of School:

- 300 and less pupils: 1
- 301 and 600 pupils: 2
- 601 and 1000 pupils: 3
- 1001 + pupils: 4

7. Number of pupils in your class:

- 25 and less pupils: 1
- 26 - 35 pupils: 2
- 36 - 50 pupils: 3
- 51 + pupils: 4
8. Subject package you are following

- General field of study (without Mathematics) 1
- Commercial field of study 2
- Technical field of study 3
- General field of study (with Mathematics and Science) 4
- Other (specify) 5

9. Are/were you responsible for the choice of the subject package you are following:

- Yes 1
- No 2

10. Is the school you are attached to having a Head of Department (H.O.D.) responsible for Guidance Services?

- Yes 1
- No 2

11. Is the school you are attached to having a guardian teacher?

- Yes 1
- No 2

12. Eating habits

- One meal a day 1
- Two meals a day 2
- Three meals a day 3
- Other (specify) 4
B. EFFECTS OF STRESS

Furnish your answer by simply placing an "x" in the square opposite the relevant code number, for example:

Did you have a feeling of leaving the school during 1991-1992 which you think is produced by the stress you experience in school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

13. Did you experience any nervousness, anxiety and exertion during 1991 - 1992 which you feel is/was due to the pressure you experience in school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

14. Did you have any of the following illnesses during 1991 - 1992 which you think is produced by stress you experience at school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 Asthma</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.2 constipation</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.3 tension headache</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.4 dizziness</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.5 being tired all the time</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.6 sleeplessness</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.7 other (specify)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

15. Did you have a feeling of quitting the school during 1991-1992 which you think is produced by the stress you experience in school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

170
16. Did you have a feeling of dodging certain lessons during 1991-1992 which you think is produced by the unbearable incompetence of a subject teacher?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

17. Did you have a feeling of mobilising other pupils in 1991-1992 to rebel against the stressful life in school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

18. Did you have any of the following feelings which you think is produced by stress you experience at school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.1 Cheating</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18.2 Deliberately getting into trouble to get sent out of class</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18.3 Sleeping in class as an escape</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18.4 Faking illness</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18.5 Contemplating suicide</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18.6 Other (specify)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

19. Did you use the following because of stress in school?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.1 Palliatives</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19.2 Drink alcohol</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19.3 Tobacco</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19.4 Sleeping pills</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19.5 Other (specify)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
20. Did you experience the following emotional disorders

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.1</td>
<td>Depression</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.2</td>
<td>Anxiety</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.3</td>
<td>Excessive, incontrollable fear</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.4</td>
<td>Urge to steal</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.5</td>
<td>Urge to set fire</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.6</td>
<td>Inadequate as a person</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.7</td>
<td>Mental exhaustion</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20.8</td>
<td>Other (specify)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

21. Do you experience the following physical illnesses

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.1</td>
<td>Poor sight</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.2</td>
<td>Poor hearing</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.3</td>
<td>Poor attention span</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.4</td>
<td>Reading difficulties</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.5</td>
<td>Migraine headaches</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.6</td>
<td>Poor memory</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.7</td>
<td>Menstrual disturbances</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.8</td>
<td>Painful urinations</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.9</td>
<td>Difficulty in sitting still</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.10</td>
<td>Acting before thinking</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.11</td>
<td>Physical exhaustions</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.12</td>
<td>Skin diseases e.g. exzema; acne, hives</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21.13</td>
<td>Other (specify)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
22. Do you experience:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.1</td>
<td>Poor vocabulary</td>
<td>1</td>
</tr>
<tr>
<td>22.2</td>
<td>Grammar difficulties</td>
<td>1</td>
</tr>
<tr>
<td>22.3</td>
<td>Comprehension difficulties</td>
<td>1</td>
</tr>
</tbody>
</table>

23. Do you experience study methods difficulties?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
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</table>

24. Do you experience poor vocational orientation?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

C. STRESS MANAGEMENT

25. Does your school have any of the following programmes to support and assist you overcome stress?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.1</td>
<td>Panel for Identification, Diagnosis and Assistance (PIDA)</td>
<td>1</td>
</tr>
<tr>
<td>25.2</td>
<td>In-school counseling</td>
<td>1</td>
</tr>
<tr>
<td>25.3</td>
<td>Cooperative learning</td>
<td>1</td>
</tr>
<tr>
<td>25.4</td>
<td>Teaching lessons on stress</td>
<td>1</td>
</tr>
<tr>
<td>25.5</td>
<td>Other (specify)</td>
<td>1</td>
</tr>
</tbody>
</table>

26. Do you jog or do some physical exercises every day?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
27. Do you have a proper diet every day? e.g. At least one fruit a day; milk; vegetables; eggs.

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

(72)

28. Do you give yourself sufficient relaxation, rest and meditation every day?

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

(73)

29. Does the school give you freedom to talk out your problems?

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

(74)

D. STRESS FACTORS

On a scale of 1-4 and by means of an "x", indicate to what degree the factors mentioned below are/were responsible for your stress

1 = No stress

2 = Little

3 = Great deal

4 = Particularly great deal

Example

The authoritarian principal

<table>
<thead>
<tr>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>No stress</td>
</tr>
<tr>
<td>Little stress</td>
</tr>
<tr>
<td>Great deal</td>
</tr>
<tr>
<td>Particularly great deal</td>
</tr>
</tbody>
</table>
1. Inability of some teachers to reach the child's level, e.g. gap in communication

<table>
<thead>
<tr>
<th>No stress</th>
<th>Little</th>
<th>Great deal</th>
<th>Particularly great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(75)

2. Negative attitude of some teachers towards children and teaching

(76)

3. Professionally unqualified teachers

(77)

4. Unapproachable, authoritative and too strict principal and teachers

(78)

5. Too lenient, permissive and uncaring principal and teachers

(79)

6. Understaffing

(80)
7. Lack of adequately qualified teachers in Physical Science Mathematics and General Science

8. Incidents inspired by radical pupil leadership

9. Having to conform to too young or too old children

10. Having no friends

11. Too much emphasis on the theoretical usage of the Second Languages

12. Inadequate facilities in classrooms

13. Classes too crowded
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>Unavailability of library</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (9)</td>
</tr>
<tr>
<td>15.</td>
<td>Poor library facilities and stock</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (10)</td>
</tr>
<tr>
<td>16.</td>
<td>Unavailability of laboratory</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (11)</td>
</tr>
<tr>
<td>17.</td>
<td>Poor laboratories facilities and equipment</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (12)</td>
</tr>
<tr>
<td>18.</td>
<td>Unavailability of sporting grounds</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (13)</td>
</tr>
<tr>
<td>19.</td>
<td>Inadequate supply of books and stationery</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (14)</td>
</tr>
<tr>
<td>20.</td>
<td>Outdated or old fashioned teaching methods</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (15)</td>
</tr>
<tr>
<td>21.</td>
<td>Unwritten and inconsistent school policy and regulations</td>
</tr>
<tr>
<td></td>
<td>![Scale](1 2 3 4) (16)</td>
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<td></td>
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<td>---</td>
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</tr>
<tr>
<td>22.</td>
<td>Non-involvement of children in the management and decision making of school policies</td>
</tr>
<tr>
<td>23.</td>
<td>Impersonal school curriculum</td>
</tr>
<tr>
<td>24.</td>
<td>Too much intracurricular activities at the expense of extracurricular activities</td>
</tr>
<tr>
<td>25.</td>
<td>Too many unscheduled extra-curricular activities at the expense of intracurricular activities</td>
</tr>
<tr>
<td>26.</td>
<td>Neglect of certain subjects</td>
</tr>
<tr>
<td>27.</td>
<td>Impersonal atmosphere at school</td>
</tr>
<tr>
<td>28.</td>
<td>Too many double periods in a day</td>
</tr>
<tr>
<td>29.</td>
<td>Lengthy teaching and learning hours in the school</td>
</tr>
<tr>
<td></td>
<td>Compulsory exorbitant and unaffordable school fund</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
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<tr>
<td>30.</td>
<td>Compulsory exorbitant and unaffordable school fund</td>
</tr>
<tr>
<td></td>
<td>No stress</td>
</tr>
<tr>
<td>31.</td>
<td>Audited financial statements not furnished to parents and/or pupils</td>
</tr>
<tr>
<td>32.</td>
<td>No Educational Assistance Services in the school</td>
</tr>
<tr>
<td>33.</td>
<td>Tedious compulsory manual labour in the school:</td>
</tr>
<tr>
<td>33.1</td>
<td>cutting grass</td>
</tr>
<tr>
<td>33.2</td>
<td>planting green grass</td>
</tr>
<tr>
<td>33.3</td>
<td>cleaning toilets</td>
</tr>
<tr>
<td>33.4</td>
<td>cleaning offices</td>
</tr>
<tr>
<td>33.5</td>
<td>other (specify)</td>
</tr>
<tr>
<td>34.</td>
<td>Too many unscheduled tests within a short space of time</td>
</tr>
<tr>
<td>35.</td>
<td>Too many unscheduled written work and assignments each day from different subject teachers given as homework</td>
</tr>
<tr>
<td>36.</td>
<td>The &quot;sword&quot; of not being given the second chance of repeating Std. 10</td>
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<td>---</td>
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<tr>
<td>37. Tension accompanying the late release of Matric Examination results by the Department of Education and Training</td>
<td>No stress</td>
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(36)

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<tbody>
<tr>
<td>38. Compulsory three languages learning</td>
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<tbody>
<tr>
<td>39. Brutal and unjustified corporal punishment</td>
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<tbody>
<tr>
<td>40. Teacher carrying a cane during lesson periods to threaten pupils for positive response</td>
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<tbody>
<tr>
<td>41. Subjects offered at the wrong time of the day</td>
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</thead>
<tbody>
<tr>
<td>42. Neglect of Parents' Days</td>
<td></td>
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<td>2</td>
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<tbody>
<tr>
<td>43. Unavailability of the News Letter informing parents and the public about intracurricular and extracurricular activities in the school</td>
<td></td>
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<td>1</td>
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BIBLIOGRAPHY


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