FACTORS WHICH COULD INFLUENCE THE DEVELOPMENT OF ADOLESCENT DEPRESSION

By

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Submitted in part fulfilment of the requirements for the degree of

MASTER OF EDUCATION – WITH SPECIALISATION IN GUIDANCE AND COUNSELLING

In the

DEPARTMENT OF PSYCHOLOGY OF EDUCATION

At the

UNIVERSITY OF SOUTH AFRICA

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JANUARY 2003

I declare that: "Factors which could influence the development of Adolescent depression", is my own work and that all the sources that I have used or quoted, have been indicated and acknowledged by means of complete references.

…… ……

Suzanne Claire McLean Date

ACKNOWLEDGEMENTS

This dissertation would not have been possible without the help of the following people:

- My supervisor, Dr G.E. Pienaar, for his patience, astute guidance and encouragement.
- Ria Joubert MSc (Hons) for her assistance and advice with the statistics.
- Ross, for the proofreading and advice regarding grammar and style.
- My husband, for believing in me and helping me to realise a dream.
- My children, for their understanding when I couldn't be there to join in the fun.

January 2003

To my family,

For your unconditional love and support.

"Learning is not worth a penny when courage and joy are lost along the way"

Johann Heinrich Pestalozzi
Swiss Educational Reformer

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Degree : Master of Education
Subject : Psychology of Education
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ABSTRACT

An investigation into the prevalence and causative factors of adolescent depression in the greater Johannesburg area was undertaken. Present-day South African socio-economic pressures together with the normal demands and difficulties of adolescence, led to an investigation into which factors were having a bearing on adolescent depression and whether more male than female adolescents were depressed.

A literature study was done and major factors, which could potentially influence the development of depression, were identified.

The results of the empirical investigation indicated that negative family relations and negative peer relations play a significant role in the development of adolescent depression. Other identified factors did not appear to have a statistically significant bearing on adolescent depression. No significant statistical difference was found between the prevalence or severity of male and female adolescent depression.

Educational implications of the findings are discussed and guidelines are given to teachers and parents.

Key Words

- Adolescent
- Depression (psychology)
- Genetic predisposition
- Family relationships
- Peer relationships
- Gender (depression)
- South African socio-economic factors

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CHAPTER 1 – ORIENTATION

1.1. Background

According to the World Health Organisation statistics, the world average for suicide is 16 per 100 000. South Africa's figure is 17.2 per 100 000 or 8% of all deaths. This relates only to deaths reported by hospitals – the real figure is higher. About 60% of those who kill themselves suffer from depression (Schlebusch in Shevlin 2002:12).

In the United States of America, the suicide rate for adolescents has increased more than 200% over the last decade. Adolescent suicide is now responsible for more deaths in youths aged 15 to 19 than cardiovascular disease or cancer (Goldberg in Cooper 1996:3; Joshi 1996:4). Two recent epidemiological studies have estimated that about 10% of the general population of America is depressed at present and that greater than 20% of adolescents in the general population of America have emotional problems (Goldberg in Cooper 1996:1 and Sue, Sue and Sue 1997:325). It should be noted that depression in adolescents is underdiagnosed, because the classic indicants of depressive illness can be absent in adolescents. There is also a tendency for depression-related problems in young persons to unfold in a myriad of atypical or idiosyncratic clinical forms (Weller 1985:368).

The biggest danger associated with depression is the possibility of suicide. Suicidal thoughts and behaviours have their origin in the feelings of hopelessness that are very common in depressed people (Goldberg in Cooper 1996:2) The underdiagnosis of adolescent depression can lead to serious difficulties in school, work and personal adjustment which often continue and worsen into adulthood (Blackman 1995:1).

The causes of adolescent depression have been widely researched internationally:

Biological causes have focused on:

- Genetic Vulnerability – with a monozygotic twin concordance rate of 76% (Benzle in Morgan 2001:2).
- Hypersecretion of cortisol and of growth hormone during sleep (Bartlett 2001:1).

Common Psychosocial Stresses appear to be: (Lamarine 1995:391 and Bartlett 2001:2).

- Social skills deficit.
- Lack of family cohesion, expressiveness, organisation and family conflict.
- Deficient ability to provide for self-monitoring, self-evaluation and self-reinforcement.
- Negative views of self, the world and one's future.
- Learned helplessness.
- Deficient problem solving skills

- **Common Social Stresses are:** (Goldberg in Cooper 1996:2 and Bartlett 2001:2).

- Separation, divorce of parents.
- Death of a loved one.
- A move from one town, or even one neighbourhood to another.
- Academic, sports or athletic failure.
- Injury or physical illness restricting activity.
- Embarrassment, shame, guilt or loss of face.
- Repeated physical, emotional or verbal abuse

Adolescence is a period of transition involving changes in physical development, cognitive abilities, emotional adjustment and self esteem (Nilzon and Palmerus 1997:935). In addition, there are changes in family relationships, and these, along with family life events and family dynamics, have been found to play a significant role in the development of adjustment problems during this period.

In the past, many social scientists viewed adolescence as a highly stressful, unstable period of the lifecycle and hence considered depressive symptoms to be a relatively common and normal aspect of adolescent development. However several recent studies have found that adolescent depression is not the transitory, benign condition it has been presumed to be. Depressive symptoms have been linked to adolescent suicide behaviour

(Robertson and Simons 1989:125). In addition, strong evidence suggests that adolescent depression often is a precursor to substance abuse and major depressive episodes during adulthood.

In South Africa today abuse, AIDS, crime and unemployment are some of the most commonly debated topics. Many commentators have come to refer to South Africa as a "culture of violence" – a society which endorses and accepts violence (Vogelman and Simpson 1990:1). South Africans today face extraordinary pressures and stresses and adolescents are vulnerable to the effects of these stresses.

There is very little research on the epidemiology of adolescent depression within the South African context. Phone calls to The Depression and Anxiety Support Group and The Mental Health Information Centre (10 January 2002) revealed that there are no available statistics on the prevalence of adolescent depression in South Africa. A visit to the South African National Council on Alcoholism and Drug Dependence (SANCA) on the 21 January 2002 revealed that the South African Community Epidemiology Network on Drug Use (SACENDU) has conducted epidemiological research into adolescent substance abuse throughout South Africa (including Gauteng). However, this research reveals that it is difficult to derive any accurate information on adolescent depression from the statistics on adolescent substance abuse.

The available research, from the above organisations, appears to focus on depression as a consequence of substance abuse, whereas international research points to the relationship between substance abuse and depression as circular (Golant and Golant 1998:13). Suffice to say that all of the above mentioned organisations did acknowledge an increase in suicides (particularly in areas of South Africa – like the Mitchell's Plain area), post traumatic stress disorder and substance abuse in adolescents (Seedat; Van Nood; Vythilingum; Stein and Kaminer 2000:10). Can we hypothesise from this that adolescent depression is also more prevalent in South Africa today?

This seems to highlight a paradox. Organisations in South Africa like SANCA state that there is an increase in adolescent substance abuse, which is commonly associated with depression, and that adolescent suicide has increased in parts of South Africa. Why then is there little if any research on the epidemiology of adolescent depression within South Africa, particularly when one takes into account the country's widespread socio-economic difficulties? Surely a starting point is to understand the prevalence of adolescent depression in South Africa and the factors which appear to influence the onset of adolescent depression within the South African context?

This study focuses on determining the prevalence of adolescent depressive symptoms within the greater Johannesburg urban area. The study focuses on the factors and stressful events, which appear to influence the development of depressive symptoms in South African adolescents. It determines whether there is a significant difference in the prevalence of depression amongst males and females. With greater knowledge of the epidemiology of adolescent depression within this sample, one is able to begin to determine the relative influence of familial, peer, genetic, gender and other life factors on adolescent depression. The ultimate aim is therefore to gain a better understanding of the prevalence of adolescent depression and the factors that are influencing the development of adolescent depression, within the South African context.

1.2. Analysis of the Problem

This section deals with becoming aware of the problem. A preliminary literature study is done to explore the problem and finally a problem statement is formulated.

1.2.1. Awareness of the problem

Effective prevention and treatment of adolescent depression requires the identification of those environmental factors that predispose a young person to depression. If adults can learn to recognise the kinds of psychological, behavioural and social events that are risk factors, they can begin constructive interventions and stimulate healthy emotional development with adolescents.

Many social scientists believe that the characteristics of adolescents have evolved. Some label the youth of today Generation X (Codrington 1998:1). Whether we agree with this label or not, there is substantial evidence that today's generation of young people do have certain defining characteristics that differentiate them from their parents when they were adolescents. It is wholly relevant to bear these characteristics in mind, as they are the essence of understanding today's youth. Effective intervention rests on having a clear understanding of what is deemed most important in the lives of today's adolescents.

It is possible that one of the greatest barriers to effective identification, assessment and treatment of adolescent depression is that the culture in which they live is radically different from the youth culture that many educators and treatment professionals experienced in their youth. Whereas parents have worried for the last half-century about their 18 year olds driving, now in a time of car hijackings, they can be extremely concerned. Parents have always worried about their adolescent's sexual behaviour, but now, in a time of date rape and AIDS they have a reason to be very anxious about their welfare (Codrington 1998:3).

The problem with not understanding the etiology of the adolescent's depression is clearly demonstrated in Shochet and Dadd's (1997:309) research. They examined family intervention programmes as a form of treatment of adolescent depression and revealed that to date, research fails to show that family intervention programmes add to the efficacy of treatments provided to the adolescents. Part of the reason for this is that research has shown that family factors are often antecedents to the adolescent's depression. In general family intervention programmes educate parents with regard to the cognitive-behavioural skills being taught to the adolescents, so that parents can reinforce these skills and become allies in the skills-building component of their psycho-educational programme to the adolescents (Shochet and Dadds 1997: 309).

It is unclear to what extent these cognitive behavioural programmes are mindful of the family processes that might predispose the development of depressive cognitive processes in adolescents, particularly a negative view of the self, one of the most

consistent and strong predictors of adolescent depression (Walker 1997:1-3). In the process of 'reinforcing' the cognitive skills taught to adolescents, parents may inadvertently signal a lack of confidence in the adolescents coping style, leading to increased conflict (Shochet and Dadds 1997: 310).

The bulk of evidence supporting family factors as antecedents to depression should encourage further new and creative approaches to involving families in treatment of adolescent depression. The worldwide rise in adolescent suicide rates in both developing and developed countries serves as a vivid reminder that modern society often does not provide a nurturing, supportive, and healthy environment in which children can grow and develop. It is therefore vital that more creative and appropriate ways are found to include families in the treatment of adolescent depression.

1.2.2. Exploring the problem

Adolescence is a time of acute stress and parents would seem to be a natural source of support and understanding during this period. Peers might serve this function to some extent, but it seems likely that certain types of doubts and anxieties cannot be shared with friends, given the volatile nature of peer associations during this period of social sorting and identity formation (Robertson and Simons 1989:128). Thus the quality of the relationship between an adolescent and his or her parents might be considered a rough index of whether the youth has access to an important source of social support.

The problem is that the concept of the "latchkey kid" i.e. children who are left to their own devices usually outside school hours, is one that was defined for this generation of youths. This is a generation that has arrived home to an empty house, with both parents working. It is alarming that studies indicate that nearly a third of Johannesburg's children and nearly half of Soweto's fall into this category (Van Zyl Slabbert; Malan; Marais; Olivier and Riordan 1994:76). There appears to be a relationship between latch-key kids and depression. Unsupervised adolescents are more prone to substance abuse,

risk-taking, depression and low self-esteem (Richardson; Radziszewska; Dent and Flay 1993:32-9).

Weakened family structures and social relations have resulted in this generation of adolescents spending every other weekend at their other parent's home and has seen a profusion of different family relationships, such as "dad's girlfriend" or "mom's previous ex-husband". This has not only caused young people to be sceptical of relationships but has negatively impacted on the social support available to adolescents (Codrington 1998:4).

South African teenagers today are subject to more stress than were teenagers in previous generations. The stress is of three types. First teenagers are confronted with many more freedoms today than were available to past generations. Second, they are experiencing more losses, to their basic sense of security and expectations for the future that earlier generations did not encounter. And third, they must cope with the frustrations of trying to prepare for their life's work in school settings that hinder rather than facilitate this goal (Codrington 1998:9).

The University of South Africa (UNISA) substance abuse research project of 2000 produced the following preliminary findings on adolescent scholars. Approximately 21% of all respondents identified drugs as the most important problem facing young people while 20,5 % of them pointed "crime and violence in school" as the main issue of concern. Furthermore 14 % of scholars indicated "sexual issues" as the one thing which challenged them the most and another 15% mentioned "doing well at school" as the most important challenge facing them (Ovens 2001:2).

In South Africa, this generation of adolescents will struggle to find employment and if they are lucky enough to find a job they will earn less (in real terms) than the generation before them. The current economic prospects for South Africa look bleak to say the least. Add to this the AIDS epidemic and the ever increasing crime rate and the future is not a bright place.

"My generation inherited not free love, but Aids, not peace but nuclear anxiety, not cheap communal lifestyles but crushing costs of living, not free colleges but colleges priced for the aristocracy" (Beaudoin in Codrington 1998:10).

Early identification and aggressive treatment of depression is a useful first step in addressing the clinical problem of suicide. Roy (in Jacobs 1999:9), found that only 29 % of the suicide victims in his study who were depressed were receiving adequate antidepressant or lithium treatment at the time of the suicide.

An exploration of the treatment options available to the depressed adolescent reveals that in general the major types of psychotherapy fall into four broad categories (Hirschfield and Shea in Sue, Sue and Sue 1997: 350).

- Those that focus on helping the depressed individual gain an understanding and awareness of the unconscious forces and conflicts, which result in depressed mood and behaviour. These approaches are best described as **insight-oriented therapy**.

- Those which directly target changing "depressed" behaviour by changing the consequences which are believed to strengthen and weaken behaviour. These methods fall under the heading of **behaviour therapy** or behaviour modification.

- Those which stress changing maladaptive ways of thinking as a means of changing resulting emotions as and behaviour. This type of therapy is called **cognitive therapy**.

- Those which emphasise improving the depressed individual's interpersonal skills and his relationships with others. This category includes **interpersonal psychotherapy** and **family therapy** (Ingersoll 1996:82).

The drawbacks of the treatments available to depressed adolescents are discussed below:

Insight Oriented Therapy – This is usually a lengthy, expensive process, since therapy sessions are scheduled weekly for periods of time, which can extend for years. With this approach, parents often complain they are "out of the loop" and have no idea what is going on with their adolescent's therapy, since the bulk of the work takes place between the child and his therapist. Adolescents may find the hard work of therapy tedious and not particularly enjoyable. Certainly if this approach is to be successful, it requires that the young person make a commitment to a lot of hard – sometimes painful –work for a fairly long period of time. While there are some very bright, verbal young people who can follow through on such a commitment, many adolescents find the experience uncomfortable, incomprehensible, and therefore of little help (Ingersoll 1996:83).

Behaviour Therapy – There is evidence to show that behavioural methods can be very helpful for specific behaviour problems associated with depression, such as social withdrawal, school refusal and poor school performance. However the scope of behaviour therapy is limited: behavioural techniques alone cannot offer a comprehensive treatment programme for depression (Sue, Sue and Sue 1997:350). Behavioural techniques such as modelling, rehearsal, self-monitoring and rearranging consequences are important components of other forms of treatment, especially cognitive therapy (see below).

Cognitive-Behavioural Therapy – Researchers who have studied the thought patterns and beliefs of depressed individuals tell us that negative bias and cognitive distortions accompany depressive illness in both adults and children. Cognitive therapy techniques are designed to help depressed adolescents identify and alter these maladaptive ways of thinking, include cognitive restructuring, attribution training, self-control training and adjunctive techniques such as social skills training (Beck 1991 368-75). The brevity of the treatment as well as the structured, directive approach is likely to appeal to adolescents (Sue, Sue and Sue 1997:351 and Ingersoll 1996:89).

It is important to point out that cognitive therapy has not been verified as an effective treatment for suicidal youngsters or those with co-existing problems such as conduct disorder, substance abuse, personality disorders or learning disabilities (Ingersoll 1996:89). Since many depressed adolescents have one or more co-existing conditions, the number of adolescents who might benefit from cognitive treatment might be somewhat smaller than would appear at first glance. Most studies on cognitive therapy for adolescents have been concerned with group treatments. Group therapy is considered a particularly useful format for adolescents, but in practice it can be difficult to set up groups of similarly depressed adolescents at any one time (Bednar and Kaul 1994: 662).

Interpersonal Therapy – Interpersonal therapy is a short-term treatment for depression that targets the client's interpersonal relationships and that uses strategies found in psychodynamic, cognitive-behavioural and other forms of therapy (Sue, Sue and Sue 1997:350). Treatment is aimed at correcting these disturbances by improving communication among all family members, teaching problem solving skills, and helping parents re-establish their positions as authority figures in the household. In restoring equilibrium to the dysfunctional family it is assumed that the depressed adolescent will gradually improve as family functioning improves (Ingersoll 1996:89).

Antidepressant medication – Antidepressant medications are described as "mood regulators" since they seem to restore normal functioning by correcting malfunctions in the chemical messenger systems of the brain. Different antidepressants apparently work in different ways to correct neurochemical problems.

Tricyclic antidepressants are often helpful in treating depressed adolescents but the benefits may not be obtained without some cost. Many adolescents find the side effects so unpleasant that they discontinue use of the medication. Tricyclics are also extremely dangerous when taken in overdose, which means they should certainly be locked away from potentially suicidal adolescents (Sue, Sue and Sue 1997:349 and MIMS: 1998).

Monoamine Oxidase Inhibitors (MAOIs), are particularly helpful with people who suffer from so-called atypical depressions. That is depressive episodes characterised by excessive eating and sleeping, anxiety, deterioration in mood and energy across the course of the day, and oversensitivity to perceived slights and rejections (Ingersoll 1995:89 and Sue, Sue and Sue 1997:349). A major drawback is that patients who take them must scrupulously avoid foods rich in tyramine, such as aged cheese, processed meats, wine and beer. Since adolescents cannot always be trusted to avoid the temptations of pepperoni pizza or beer and wine, the risk that MAOIs pose for this age group is clear.

Selective Serotonin Re-Uptake Inhibitors (SSRIs) – the newest drugs to treat depression- have few serious long term side effects. Research has shown that this medication is both safe and effective for the treatment of mood disorders in children and adolescents (Ingersoll 1996:105 and MIMS: 1998).

Appropriate and successful treatment of adolescent depression rests on:

- the early and accurate diagnosis of depressive symptoms;
- an understanding of the specific aetiology of the adolescent's depression;
- a broader understanding of the epidemiology of adolescent depression within the adolescent's specific context;
- an up-to-date understanding of the world for the adolescent in the new millennium.

1.2.3. Problem Statement

Our knowledge of the epidemiology of adolescent depression in South Africa is extremely limited. Without this knowledge how can we be alert to the psychosocial risk factors and the early warning signs of adolescent depression?

Does insufficient understanding of the complex nature of current adolescent biopsychosocial development and the changing social world faced by adolescents negatively impact on their mental health care? Surely the mental health care of

adolescents is best achieved when parents, teachers and therapists build socially supportive relationships with them, that may moderate adverse influences that adolescents experience in their environment. To build socially supportive relationships one needs understanding.

It appears that there is a valid need for epidemiological studies on adolescent depression, its risk factors and methods of treatment and prevention. There is a need for adults living and working with adolescents to be educated with regard to adolescent biopsychosocial development, to have greater awareness of adolescent depression and to be trained to identify early signs and symptoms of physical, emotional and social distress in adolescents.

1.3. Aims of Research

This section concerning the aims of the research deals with general as well as specific aims for the research undertaken.

1.3.1. General Aims

The general aim of the research is to:

- Determine the prevalence of adolescent depression symptoms among males and females.
- Determine the influence of familial, peer, gender, genetics and South African factors on the development of adolescent depressive symptoms with a sample of Grade 11 adolescents in the greater Johannesburg urban area.

1.3.2. Specific Aims

The specific aim of the study was to use the Goldberg Depression Scale (GDS) and the Adolescent Life Perspective Questionnaire (ALPQ), which investigated the bio-

psychosocial factors, which influence the South African adolescent today. As many factors, as possible, which could influence the emotional development of an adolescent were included in this Adolescent Life Perspective Questionnaire. The study thus provided data on the correlations between certain biopsychosocial factors and adolescent depressive symptoms.

1.4. Research Methods

The study was comprised of two methods: namely the literature study and the empirical investigation. The literature study provided information with regard to depression in general, adolescent depression in particular and the biopsychosocial factors, which could influence the development of depressive symptoms in adolescents.

The empirical investigation of the study attempted to determine the epidemiology of adolescent depressive symptoms and the factors, which appeared to influence the development of adolescent depressive symptoms. This was done by means of questionnaires, which the adolescents completed. A pilot study was conducted with a small sample of Grade 11 adolescents and feedback from the adolescents involved, denoted any confusion in the application or wording of the questionnaires. Based on this feedback, further refinement to the questionnaires took place. Thereafter a sample of Grade 11 adolescents in the greater Johannesburg urban area was selected for the research study.

1.5. Demarcation of the study

One of the problems with trying to research the epidemiology of adolescent depression is that depression is a medical condition, which requires a clinical diagnosis. Therefore this study – being largely empirical – and relying on questionnaires, specified that the factors influencing **depressive symptoms** and not **clinical depression** were researched.

Further, this study focused on a sample of adolescents from Secondary Schools in the greater Johannesburg urban area. The results of the sample attempted to reflect the

generalised urban population of South African adolescents. The Johannesburg area was chosen for practical purposes, but it could be considered to be representative of any urban area of South Africa.

1.6. Explanation of concepts

This section will define a number of concepts that are relevant to this research.

1.6.1. Adolescence

For the purpose of this study, adolescence is defined as the period from puberty (12 or 13 years) into the early twenties. During this period, which Erikson called Identity versus Role Diffusion, the child has to integrate all of the tasks from the previous four stages into a coherent identity, and prepare to face the world as an independent adult. In addition to dealing with the changes in his or her body brought on by the onset of puberty, the adolescent must compare and integrate how others see him or her and how he or she sees himself/herself. The adolescent must also adjust to his or her budding sexuality (Erikson 1968:21).

Throughout all of this, the adolescent must also decide whether he or she will act on his or her emerging sexual abilities and, if so, how he or she will establish the relationship(s) in which he or she will do this. During this phase, the adolescent must also connect the roles and skills he or she has learned with what he or she wants to be as an adult. Integrating these skills and desires with practical realities takes place through career planning (Erikson 1968:25).

1.6.2 Depression

Depression is defined as a psychological state of despondency, dejection, low spirit, sadness, inactivity, and difficulty in thinking, concentrating and in seeing a situation in perspective. Prolonged depression is a common ultimate cause of suicide and a common

emotional experience among adolescents (Van Den Aardweg and Van Den Aardweg 1993:82).

1.6.3 Depressive symptoms

Depressive symptoms refers to the changes in the body and the mind which are the signs of the mental state of depression.

1.6.4 Epidemiology of adolescent depression

Epidemiology of adolescent depression refers to the study of the causes, spread and control of the mental state of depression.

1.6.5 Genetic Predisposition

This definition refers to the inherited characteristics, which could influence the development of depression.

1.6.6 Peer Relationships

Peer relationships are defined as relationships with people of approximately the same age and status as oneself.

1.6.7 Family Relationships

Family relationships are defined as relationships between a group consisting of parents and their children.

1.6.8 Gender characteristics

Refers to the social and cultural differences and expectations that are associated with the state of being male or female.

1.6.9 Biopsychosocial factors

Refers to the biological; psychological and social factors, which can combine to cause depression. Bio-psychosocial models of depression suggest that there are multiple causes of depression and a number of factors may operate singularly or interact in causing depression in adolescents (Goldberg in Cooper 1996:6).

1.7. Research Programme

The research comprises five chapters that are as follows:

Chapter 1

Chapter 1 includes background information on the problem of adolescent depression. It includes background information on adolescents living in the South African context and the problematic factors that could contribute to adolescent depression. This chapter includes an analysis of the problem, the aims of the study, a description of the research methods of the study, a demarcation of the study and an explanation of the key concepts.

Chapter 2

This chapter includes a review of the literature on adolescent depression. Chapter 2 includes familial, peer, genetic and gender factors influencing adolescent depression as well as factors considered particularly relevant to South African adolescents: future prospects, violence and crime and the threat of AIDS.

Chapter 3

Chapter 3 explores research designs and methods. This chapter includes a discussion of the research problem, the aim of the empirical investigation, the research postulate,

research tools used in the investigation and selection of the sample. The compilation, application and processing of data collected is presented.

Chapter 4

Chapter 4 presents with the results of the Goldberg Depression Scale (GDS) and the Adolescent Life Perspective Questionnaire (ALPQ). These results are analysed and correlated. The implications of these results are discussed and suggestions offered for relevant school and community based programmes will be given.

Chapter 5

Chapter 5 consists of a discussion of research results, conclusions and recommendations with regards to the dealing effectively with adolescent depression, as parents and educators. The significance of the findings and the limitations of the study are also included in this chapter.

CHAPTER 2 – THE DEPRESSED ADOLESCENT

2.1. Introduction

Depression affects at least 10% of the population directly at some stage or other in their lives (Goldberg 1996:1). A number of recent epidemiological studies have reported that up to 2.5% of children and 8.3% of adolescents in the United States of America suffer from depression (Birmaher; Ryan and Williamson 1996:1427-39).

A recently published longitudinal prospective study found that early-onset depression often persists, recurs and continues into adulthood and indicates that depression in youth may also predict more severe illness in adult life (Weissman and Wickmaratne 2000:5). Depression in children and adolescents is associated with an increased risk of suicidal behaviours. In 1997, suicide was the third leading cause of death in 10-24 year olds (Birmaher; Ryan and Williamson 1996:1427-39).

South Africa has no official suicide figures, but according to Lifeline (a 24-hour telephone counselling service), in the first nine months of 1999, they received 1364 suicide calls, and 2590 in 1998. The Depression and Anxiety Support Group, which runs a nationwide telephonic counselling service, received 667 calls during the first three months of 2001, of which 448 were from depressed people (Shevlin 2001:2). Seventy percent of people who attempt suicide have major depression, which is a treatable condition (Jones 2000:47).

2.2. Definitions of depression

Depression occurs on at least three different levels: as a symptom, as a syndrome and as a disorder. Everyone shows symptoms of depression at one time or another, usually, although not necessarily, in response to situational stresses or traumas. This type of reaction can be called a depressed mood. Someone in a depressed mood is likely to report feeling "down" and sad. The individual is likely to have crying spells, to lack

energy and to have insomnia, but these are temporary symptoms that do not interfere with functioning for prolonged periods (Epanchin and Paul 1994:195).

Depression as a syndrome occurs when these feelings and behaviour are not fleeting and when they occur along with other symptoms such as decline in motivation, decrease in energy level, and feelings of self-deprecation (Cooper 1996:1 and Epanchin and Paul 1994:193). Depression may occur as a primary problem or secondary to other disorders, such as drug or alcohol problems. Depression as a disorder connotes a characteristic clinical picture that has an expected course of onset, response to treatment, and expected outcome, much like other illnesses. It is considered a fully developed psychiatric problem (Epanchin and Paul 1994:195).

The criteria for a diagnosis of major depression are listed in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM IV TR) (American Psychiatric Association 2000:369). See table below:

DSM-IV TR Criteria for Major Depression
A. Five or more of the following symptoms, present during the same two-week period, represent a change from previous functioning, and include either (1) or (2) below
1. Depressed mood 2. Diminished pleasure 3. Significant weight loss 4. Insomnia or Hypersomnia 5. Psychomotor agitation or retardation 6. Fatigue or loss of energy 7. Feel worthless or guilty 8. Diminished ability to concentrate, indecisive 9. Recurrent thoughts of death or suicide B. Symptoms do not meet criteria for Mixed Episode C. Significant distress or impairment D. Not due to substance or medical condition E. Not better accounted for by bereavement after loss of a loved one

Some adolescents have a chronic but less severe form of depression, called *dysthymic disorder,* which is diagnosed when depressed mood persists for at least two years and is accompanied by at least two other symptoms of depression. Many adolescents with dysthymia later develop major depressive episodes (American Psychiatric Association 2000:376).

2.3. Types of depression

There are different types of depression, which can be distinguished by looking at the signs and symptoms of the illness, the individual's personality features and his or her life experiences. Various brain wave recordings and hormonal tests also help to identify the particular type of depression the individual has. The different types of depression have different causes and in most instances depression results from a combination of factors coming together at one point in time to produce the mood change (Sue, Sue and Sue 1997:329).

1. Reactive depression

Reactive depression is a response to an unhappy event in the individual's life for which they are usually unprepared. Death of a close relative or friend, family strife or the unexpected loss of employment, are some of the events that can evoke an extreme state of unhappiness (Aware Organisation 2000:2). Here the mind's state of sadness is an appropriate response to an unwelcome event. Typically the person with reactive depression will feel low, anxious, often angry and irritable and will tend to be preoccupied with the upsetting event. While everybody is vulnerable to this form of depression and will succumb if the stress is great enough, some people, because of previous experiences, are more prone to a reactive depression (MacLaren 1999:24).

2. Neurotic depression

Some individuals have a low vulnerability to stress, in that aspects of their personality leave them ill prepared to deal with the everyday problems of life. These individuals are unable to manage the everyday problems of life in an emotionally efficient manner and

consequently experience repeated episodes of reactive depression. Personality traits, which typically pose a psychological handicap in this respect, are extremes of perfectionism, timidity, unassertiveness, dependency and narcissism. Perfectionism leads to disappointments; unassertiveness brings frustration and avoiding situations because of anxiety results in a sense of failure. Inevitably, repeated exposure to these experiences leads to neurotic depression (Aware Organisation 2000:3 and MacLaren 1999:25).

3. Endogenous Depression and Bipolar Depression

These types of depression are caused mainly by genetic factors. Whereas 1% of the population will develop bipolar depression at some stage in their life, some 15% of the immediate relatives of a patient with bipolar depression will develop a similar illness. Genetic research has shown that the risk increases the closer one is related to the person with the illness. An identical twin has a seventy per cent chance of developing a similar mood disorder (Bartlett 2001:3 and MacLaren 1999:26). A variety of different adoption studies have come to the same conclusion and clearly indicate that the major causative factors in these forms of depression are biological ones. However this is by no means the full explanation. Frequently such bouts of depression will only occur when precipitated by some stressful factor or major change in the person's life.

4. Secondary Depression

Secondary depression can be described as mood changes, which are due to some underlying medical or other psychiatric disorder. Probably the most familiar one in this category is a depression following a bout of flu. Depression can occur with many other viral infections, anaemia, vitamin deficiencies, thyroid and other hormonal disturbances. Certain treatments such as steroids and some blood pressure tablets can also induce mood changes. Alcohol and drugs can have a profound influence on mood and for some patients it is a major contributing factor to their depression. (Cooper 1996:6).

2.4. Adolescent depression

The DSM-1V criteria for major depression are the same for adolescents and adults. Depression presents in adolescents with essentially the same symptoms as in adults;

however, some clinical shrewdness may be required to translate the teenagers' symptoms into adult terms. Pervasive sadness in adolescents may be exemplified by wearing black clothes, writing poetry with morbid themes or a preoccupation with music that has nihilistic themes. Sleep disturbance may manifest as all-night television watching, difficulty in getting up for school, or sleeping during the day. Lack of motivation and lowered energy level is reflected by missed classes. A drop in grade averages can be equated with loss of concentration and slowed thinking. Boredom may be a symptom for feeling depressed. Loss of appetite may lead to anorexia or bulimia (Epanchin and Paul 1987:195).

The available data suggests that many adolescents are depressed. They report feelings of wanting to leave home, of not being understood, of being alienated and rejected and of restlessness. Withdrawal from family and other social activities, indifference to personal appearance, and other symptoms typical of adult depression are common. Depression is also manifested by negativistic, antisocial, irritable behaviour, especially among male adolescents. Determining whether these symptoms indicate a serious depression can be especially difficult for the diagnostician because "normal adolescence" is also a time of moodiness and, occasionally, social withdrawal (Epanchin and Paul 1987:197).

Adolescent depression may also present primarily as a behaviour or conduct disorder, substance or alcohol abuse or as family turmoil and rebellion with no obvious symptoms reminiscent of depression (Blackman 1995:2).

- It is often not possible to identify a single cause of adolescent depression. This can be distressing for adolescents who want to understand the reasons why they are ill, and frustrating for therapists who want to help. There are biological, psychosocial and social causes of depression. Research shows that: (Edelbrock 1997:3).

- Genes or early life experiences may make some adolescents more vulnerable to depression.
- Stressful life events may trigger an episode of depression.

- Some physical illnesses, drug treatments and recreational drugs can trigger depression

The diathesis-stress model of depression states that: (Edelbrock 1997:4).

- Genetic factors influence personality, emotional tone and sociability
- Environmental factors like disrupted or inadequate parenting, emotional unavailability, insensitivity and marital conflict act on top of this predisposition, resulting in extreme depression in some people.

When depressed adolescents are asked about their childhood experiences, they are more likely to report neglect, abuse, rejection and parental conflict. Depressed adolescents often have depressed or stressed parents. Can the stress of coping with a depressed adolescent lead to parental rejection or is it the poor parenting that leads to the child's depression? The answer may be different in different cases. A depressed adolescent may be hard to raise. Some parents have more coping skills than others do. An adolescent may learn to give up because parents have not modelled good ways of coping with stressful situations. A parental pattern of irritability and withdrawal lead to low self-esteem in adolescents and this predisposes adolescents to depression (Watkins 2000:2).

2.5. Adolescent depressive symptoms

Youths exhibit various expressions of stress depending on their age. Young children tend to exhibit their stress by their active behaviour: hitting, throwing things, anger, and frustration. Mixed with this may be some emotional behaviour: withdrawal, non-participation in groups, separation anxiety, unexplained episodes of crying, and sadness (Epanchin and Paul 1987:196-7). For adolescents it is estimated that 10-15% exhibit some sort of psychological upheaval and may demonstrate it in one of 2 ways: external behaviour vs. internal behaviour (Weller and Weller 1984:39).

Adolescents who demonstrate depression through external behaviour are more likely to have problems with aggression, sex and acting-out behaviour. Boys are more likely to be referred for psychological counselling because of this acting-out conduct. They are also more involved with alcohol and drug abuse and antisocial problems. Adolescents who demonstrate depression through internal behaviour are more likely to exhibit problems with obsession, phobias and somatic complaints. Here girls exhibit more phobias and depression (Epanchin and Paul 1987:196-7).

Symptoms of depression in adolescents can include any of the following:

- Depressed or irritable mood.
- Temper, agitation.
- Loss of interest and reduced pleasure in activities.
- Change in appetite, usually a loss in appetite.
- Persistent difficulty falling asleep or staying asleep (insomnia).
- Sleeping difficulty.
- Excessive daytime sleepiness or general fatigue.
- Difficulty concentrating and memory loss.
- Preoccupation with self.
- Feelings of worthlessness or sadness.
- Excessive or inappropriate guilt feelings.
- Acting out behaviour.
- Thoughts about suicide or abnormal thoughts about death.
- Plans to commit suicide or actual suicide attempt.
- Excessively irresponsible behaviour pattern (Frazier 2000:4).

Symptoms often persist for weeks or months. A physical examination rules out medical causes for the symptoms. A psychological evaluation confirms a diagnosis of depression.

2.6. Diagnosis of depression in adolescents

Diagnosis of depression in adolescents can be difficult. Adolescents are expected to be moody and unpredictable to some extent, due to the dramatic physiological changes they are undergoing. Further, adolescents – particularly troubled adolescents – often withdraw from parents and caregivers, who might be able to see behind their troubled masks. It is difficult to know where teenage behaviour ends and clinical depression starts but there are some definitive signs that something is awry, which should not be ignored.

Signs to be taken seriously include:

- extreme behaviour and mood changes including a persistent depression (not just a bad day);
- loss of interest in previous interests;
- risk-taking behaviour such as drug or alcohol abuse;
- social withdrawal;
- a break in a key relationship, which could be a best friend or even parent who was, and is no longer, close to the teenager (Schlebusch and Bosch 2000:3).

A proper diagnosis of depression must be made to rule out other explanations for the adolescent's behaviour – such as school phobia, attention deficit hyperactivity disorder and generalised anxiety disorder. A thorough family history should be taken and a physical examination should be conducted, with blood and urine samples to detect if there are any medical constraints on treatment choices (Schlebusch and Bosch 2000:4)

2.7. Common factors influencing adolescent depression.

This literature study focuses on familial; peer; genetic and gender factors, which influence the development of adolescent depression. It then focuses on the adolescent living within the present South African context and factors, which could contribute, to the development of depression within this context.

2.7.1. Familial factors influencing adolescent depression

This study focuses on research that examines familial factors from a perspective, which can apply to the South African context. Therefore the literature study on familial factors focuses less on family structure than perceived family cohesion.

The influence of family environment on adolescent development and mental health has been the subject of increasing scrutiny in recent years. Of particular interest are the roles of traditional two-parent families versus single parent family structures and of perceived emotional bonding or family cohesion. American studies have been conducted which have suggested that family cohesion is related to several psychological outcomes, including depressive symptoms (Kashani 1987:585 and McGee 1990:612). Although providing important insight into family relationships, these studies are often limited by small sample sizes, use of clinically referred populations and restriction to European participants. These limitations are important in view of the differences in both the prevalence of single parent families and the meaning of family structure between African-American and European-American families (McKeown; Garrison and Jackson 1997:269).

The face of average South African families has also changed to include re-constituted families, gay and lesbian parents, child-headed or grandparent-headed households as a result of HIV-AIDS death of parents, and so on (Steenkamp 2002:2).

Some research has hypothesised that higher levels of perceived family cohesion are associated with lower levels of depressive symptoms in adolescents, independent of family structure. The results of their study suggest that their hypothesis was correct: perceived emotional bonding in the family was found to be a stronger predictor of depressive symptoms than the particular family structure (McKeown; Garrison and Jackson 1997:279).

Another study was conducted into two aspects of family system functioning – cohesion and power – in relation to depressive affect, social self-concept and behavioural restraint in adolescents (Wentzel and Feldman 1996:237-241). Based on a family systems perspective, dimensions of cohesion and power were examined within the context of

mother-child, father-child and mother-father relationships. The results of their study indicated that the cohesive nature of family relationships had a more consistent relation to adjustment for girls than for boys. A second major finding was that adolescents who perceived parents to have relatively equal power or fathers to have more power than mothers also reported better social and emotional outcomes than adolescents who reported that mothers had more power than fathers. This study therefore suggests that adherence to culturally prescribed roles and norms of spousal relationships are likely to result in the most desirable set of child outcomes (Wentzel and Feldman 1996: 237-241).

Depressed adolescents have more negative perceptions of their families than other adolescents do. The more depressed the young person, the more negative are his perceptions of the way in which his family functions. Specifically, depressed adolescents describe their parents as distant, unsupportive, and emotionally unavailable (Nilzon and Palmerus 1997:935 and Wentzel and Feldman1996:237). They report frequent conflicts with their parents – conflicts that are often highly emotionally charged. They see their parents as intolerant and inflexible and feel that they themselves are allowed little say in decision making within the family. Finally, depressed youngsters report that their families are seldom involved, as families, in social, religious, or recreational activities. Compared with parents of non-depressed children, parents of depressed children are more authoritarian and controlling in their interactions with their children. They also use physical punishment more frequently than parents whose children are not depressed do (Ingersoll 1996:64-65).

Nilzon and Palmerus (1997:941) found that there were significant differences between depressed-anxious (DA) and non depressed-anxious (non-DA) families. In agreement with other research (Reynolds 1992:13), there were more open conflicts and major family problems in the DA group than in the non-DA group. The DA families indicated that they were less happy and less confident in their ability to solve problems than were the non-DA families.

Payne and Range's (1996:244) research into suicidality in young adults showed that young adults who lack an emotional bond with their family have an increased vulnerability to suicidality.

Research into perceived parental rejection has shown both a direct and an indirect effect on self-esteem and consequently on the development of. A propensity to blame oneself for negative elements is posited as the cause of vulnerable self-esteem. It is suggested that this self-blaming attributional style develops in response to a perceived family environment of excessive parental criticism. These families are also perceived to be high on conflict and control and low on religiosity (Robertson and Simons 1989:125-138).

- Results of an investigation into depressed and non-depressed college students' perceptions of their current family organisations showed that depressed students reported experiencing: (Lopez 1989:225).

- significantly lower conflictual independence from both parents (more conflicted, resentful, angry exchanges);
- greater dissimilarity between their beliefs and values and those of their parents;
- more inappropriate family interactions;
- significantly lower marital and parental cohesion and greater fear of separation.

Depressed students construed their family organisations quite differently. Depressed students report that they are embroiled in conflictual and dysfunctional family interactions. This psychological dependence on their parents can be in a conflictual or overly compliant way.

Observer ratings of family interaction during research into parenting behaviours and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems, indicated that: (Ge 1996:717-731)

a) Parents of 10^{th} graders with and without later adjustment problems differed in their parenting behaviours when the adolescents were in the 7^{th}, 8th and 9^{th} grades.

b) Parents of 10th graders with elevated conduct problems were more hostile than parents of 10th graders with elevated depressive symptoms when the adolescents were in the 7th, 8th and 9th grades.
c) Parents of 10th graders with elevated depressive symptoms and conduct problems were the most hostile and showed the lowest levels of warmth and disciplinary skills when these adolescents were in the 7th, 8th and 9th grades).

Research was conducted which focused on examining developmental changes in the relationship between negative cognitions and stressful family characteristics in the prediction of depression in young people. Results showed that the diathesis-stress model was manifested only in late adolescence with greater family unsupportiveness predicting higher levels of depression most for those adolescents high in negative cognitions. Cognitive approaches to treatment were predicted to be more effective if efforts to increase access to supportive relationships were included in the treatment. (Ostrander 1998:134).

An interesting perspective is noted in Neiderhiser's (1999:680-692) research into the relationship between parenting and adolescent adjustment over time. Neiderhiser comments on the fact that until recently the association between parent-child conflict has been considered unidirectional, such that conflict was thought to lead to negative adolescent adjustment for primarily family environment reasons. His findings indicate the need to recognise and examine the impact that adolescents have on parenting and the contribution of genetic factors to developmental change. For example, if a child is very irritable and difficult to soothe as an infant, the parents might withdraw from the child and adopt a more negative style of parenting very early in the child's life. By the time the child has reached adolescence, the coercive styles of parent-child interaction may be well established, although they began, in this example, as a response to a genetically influenced characteristic of the child temperament.

There are flaws in the theory that poor parenting always cause depression in adolescents. Sometimes children's problems are apparent from the earliest days of life. Also many

parents of depressed children have successfully raised other well-adjusted children who have no symptoms of depression. Finally, adolescent behaviour can have an effect on parent reactions – influence does not only flow in one direction.

2.7.2. Peer factors influencing adolescent depression

Peer pressure can be positive. It keeps adolescents participating in religious activities and playing on sports teams, even when they are not leaders. The peer group is often a source of affection, sympathy and understanding, a place for experimentation and a supportive setting for achieving the two primary developmental tasks of adolescence. These are:

1. Identity – finding the answer to the question "Who am I?"
   and,
2. Autonomy – discovering that self as separate and independent from parents
   (Lingren 1995:1).

During adolescence, peers play a large part in a young person's life and typically replace the family as the centre of an adolescent's social and leisure activities. Ross (1999a:1) goes so far as to say that at adolescence, a child's physiological, emotional and hormonal processes come together for the purpose of achieving one thing – independence from his family.

Because many children are from single-parent homes or homes in which both parents work, the amount of time adolescents spend in the company of peers is greater than ever. Studies have revealed several negative impacts are associated with peer rejection. Rejected children in Asher's (1994:1462) research reported more loneliness, aggression and higher levels of depression.

Adolescents who lack friendships or have difficulty with peer relationships miss out on their many benefits. Friends provide companionship and support each other in times of stress, such as during parental divorce or when they are having trouble at school. Because peer relationships benefit adolescents immensely, practitioners and researchers

are interested in understanding the processes by which peers reject certain children and the impact of this rejection. Some of the negative impacts associated with peer rejection are that rejected children report more loneliness and higher levels of depression than other children do.

Cliques can be a healthy part of a teen's life, but can also be dangerous to others. This was seen in the Colorado Littleton School incident in April 1999, when two senior scholars murdered 15 students as a result of their feelings of hatred towards certain groups of people at their school who had previously tormented them. The downside to cliques is that there are some groups that are valued more highly than others and those who cannot latch into groups are somewhat disenfranchised (Willis 2000:1).

Ross (1999a:2) looks at what motivating factors might drive adolescents to be influenced by his friends rather than adhering to his family's ideas and values. When an adolescent feels misunderstood by his parents, he's more likely to seek out the advice, lifestyle and values of his peers. This is challenging because it goes against parents' natural instincts to protect their adolescent from the risks that life presents.

Ross (1999b:3) proposes that parents should not suddenly become permissive but rather that they should try to influence their adolescents not through rigid rules and strict punishment but by working to develop a good relationship with them. When parents let their adolescents know that they respect their primary purpose - to become a unique individual - they will no longer struggle against them to achieve it.

More often than not, peers reinforce family values, but some peers, cliques and gangs have the potential to encourage problem behaviours as well. Ross (1999b:4) proposes that children today are feeling more isolated than they did in the past from the very people whom they need the most - parents, siblings and extended family members. Today, extended families are often scattered across the country or overseas. Divorced and single parent families are prevalent, and in two parent families both parents often work. National statistics in America indicate that the average child sees his or her family

for approximately 5-20 minutes a day. It is difficult for adolescents to feel that there is a family unit to which they belong in that short amount of time. Consequently this sense of isolation causes them to seek that sense of belonging elsewhere in order to ease the feeling of loneliness (Covey 1997:20).

Covey writes about creating a family "culture" to encourage children to have a sense of belonging. This family culture hinges upon parents implementing a structure that communicates in no uncertain terms to all family members that the family is more important than anything else; that the family takes priority over work, social and personal obligations (Covey 1997:21).

Parents have the unique opportunity of enhancing their adolescent's self-esteem, maintaining their position as being the primary influence upon their adolescents and lessening peer influence. Garber; Little; Hilsman and Weaver (1998:448) describe the influences upon a child's self-esteem as taking the shape of a pyramid with four levels. In this paradigm, a parent's unconditional love for his or her child forms the foundation of the pyramid. The second level is composed of the child's daily accomplishments. Level three involves the feedback which parents give to their children and finally, the fourth level, or top of the pyramid, is what the child's peers think about him or her. The theory is that the broader the foundation of the pyramid, the smaller the top of the pyramid is proportionally (Ross 1999a: 4).

Ross (1999b:6) suggests that one way of showing unconditional love to your adolescent is by not getting sucked into the content of what she says, but instead, listening to her feelings, and developing a non-judgemental attitude, thereby keeping the lines of communication open.

2.7.3. Genetic factors influencing adolescent depression

A genetic link to depression is supported by adoption and twin studies, which indicate that vulnerability to mood disorder is inherited in certain people. Major depression is 1.5 to 3 times more common in close relatives of people with this disorder than in the general

population (Carlson 1999:526). Garber; Little; Hilsman and Weaver (1998:449) found that adolescents whose mothers had ever been diagnosed with a mood disorder were at increased risk of suicidal symptoms.

Recent research into genetic involvement in depression appears to have moved away from trying to prove that depression is due solely to genetic factors or solely to environmental ones. The investigation now appears to lie in how many factors from each source contribute and interrelate to result in clinical depression and if there are genes or a gene specifically (that is universally) responsible for depression. The most useful data in illuminating the nature/nurture debate and depression has come from familial studies, including monozygotic and dizygotic twin analyses (Rockville 1998:98).

Rende's research (in Edelbrock 1997:4) found that genetic factors influence personality, emotional tone and sociability. Environmental factors act on top of this predisposition, resulting in extreme depression in some people.

Rende's research indicates that both depression and bipolar disorder run in families and approximately 10 to 20 % of the parents, brothers and sisters of depressed and bipolar patients suffer from these disorders themselves. An interesting point brought out by this research, and one that is a theme in the literature, is that while certain genes may exist that predispose people to become depressed, other genes act in a way that could lead to any several psychological disorders. In other words, there may be genes that are specifically responsible for depression, or there may be genes that are responsible for behaviour or other phenotypes that could lead to depression, such as alcoholism or other substance abuse (Edelbrock 1997:5).

Rosenthal and Gershon found that close relatives of people who suffer from affective psychoses are ten times more likely to develop these disorders than people without afflicted relatives. They found that if one member of a set of monozygotic twins was afflicted with an affective disorder, the likelihood that the other twin was afflicted was

69%. In contrast, the concordance rate for dizygotic twins appears to be the same whether the twins were raised together and apart (Carlson 1999:526).

While the genetic bases are clear, they do not account for the significant variability in depression. Using the statistics mentioned by Gershon, 31 % of monozygotic twins escaped an affective disorder. Therefore there must be other factors than heredity that cause depression, since the genetic make-up of the twins is 100 % concordant. Another statistic specifically for depression is that if one identical twin has serious depression, the other twin has a 65 % chance of experiencing depression (Silberg 1999: 229 and Benzle 2001:2). This remaining 35 % then begs the question, what factors were involved that prevented this disorder? General level of depression is partly inherited, but not your level of happiness. Conscious efforts can influence ones level of happiness regardless of the genetic messages. The unique life events that are experienced seem to have tremendous impact and to account for some of the variance in depression. Some environmental influences that may predict that variation are unique life experiences, poverty and weak, social and environmental ties (Benzle 2001:2).

Benzle's (2001:1-11) research article concludes that there are brain and mind disorders. Brain disorders are biological and treatable by medication and can be traced to genetic roots. Mind disorders are cognitive, personality based and perhaps even a result of spiritual chaos or malfunction and can only be solved from within by that individual who has the experience. This research together with other recent research appears to agree with the conclusion that depression is both a mind and brain problem. In this scientific context, what that observation would translate into, is that depression is both an environmental and genetic affliction.

2.7.4. Gender factors influencing adolescent depression

During adolescence there is a dramatic change in the ratio of females to males who suffer from depression, with females taking an early and enormous lead. In fact, by the age of 18, females have almost twice the reported depressive rate of males (Regier, Narrow and

Rae 1993: 90). According to Koenig (in Alexander 1999:1), the surging rates of female adolescent depression continue to affect women throughout their lifespan. It is suggested that if girls do not receive the necessary treatment in adolescence, it is likely that their depressive symptoms could continue into adulthood. Their depressive episodes often go unnoticed by adults, because depressive symptoms are often perceived as normal hormonal, adolescent moodiness (Alexander 1999:1-2).

If adults are to notice and hopefully treat female adolescent depression, it is necessary to know which factors contribute to the decline in her mental well being in the first place. Which factors explain the vast gap between female and male adolescent depression?

There are suggestions that the hormonal changes, which accompany puberty, are responsible for higher rates of depression in adolescent girls (Sue, Sue and Sue 1997: 344). Other researchers speculate that males and females have different response styles. Males distract themselves from a depressed mood, whereas females ruminate and therefore amplify the depressed mood (Ingersoll 1995: 20-21).

This is contradicted in other research in which the relationship between depressive feelings and two feminine gender-typed characteristics, "ruminating" and "silencing the self" are examined. Suprisingly, "ruminating" and "silencing the self" were associated with depressive feelings for both men and women (Marcotte 1999:5). However this association between ruminating and both sexes does not negate the widely held belief that there are gender differences in adolescent's worrying. Girls report being more worried about their appearance, interpersonal relationships, and acceptance and safety issues. These issues cannot be totally controlled by adolescent girls, because the reactions and actions of others affect the situation. Boys only report being more concerned with sports and other activities; issues that boys tend to have more personal control over (Women's Health Weekly 1998:6).

The different ways males and females are socialised in society may also be a contributing factor to the greater female depression rates during adolescence. Parents, peers and

society in general increase pressure on adolescents to adopt gender-appropriate attitudes and behaviours, often referred to as gender intensification (Sue, Sue and Sue 1997:343). Therefore boys continue to face the same expectations in adolescence as they did in childhood, such as being assertive and independent, and achieving scholastically and athletically. However, at adolescence, girls tend to be increasingly encouraged to be nurturing, non-assertive, and to base their self-concept and self-esteem on their physical appearance and on their relationships with boys. The added pressure on adolescent girls to adopt restricting feminine behaviours, as well as the actual adoption of behaviours themselves, may cause girls to become more depressed (Alexander 1999:4).

According to research (Rimm 1999:12), almost all-female adolescents are pressured to value modesty, poise, beauty, femininity and future marriageability. Adolescents become increasingly aware of their roles as women and learn to identify societal, parental and peer messages, in order to conform to their gender roles. When girls do not conform to a feminine sex role, they risk rejection or isolation from their peers.

According to The American Association of University Women Educational Foundation (1998), adolescents' responses to questionnaires show that the adolescent years are a far more negative time for girls' mental and physical health than boys'. Unfortunately, their depressive episodes often go unnoticed by adults, because depressive symptoms are often perceived as normal adolescent female moodiness. In fact, females tend to show certain symptoms of depression more often than boys, such as poor body image (Rimm 1999:15).

Other social scientists believe that the reason lies in the fact that girls are treated differently from boys and face more challenges during their early teen years. For example, girls usually begin puberty approximately two years earlier than boys. Therefore, they experience the dramatic bodily changes that secondary sex characteristics bring, such as breast development and weight gain, while boys' bodies stay the same for a couple more years. Girls tend to dislike the physical changes in their bodies, especially the weight gain that makes their bodies curvier. However, boys tend to like their physical

changes, once puberty hits (Ingersoll 1996:20-21). This dissatisfaction with their new body shape is not surprising, considering the international obsession with women being thin. Since body image is related to the self-esteem of adolescent girls, they may become depressed due to their poor body image from their changing bodies. Early maturing girls, especially, tend to be the most depressed, as they tend to feel embarrassed and ashamed of being different. This anxiety about bodily changes could make an early maturing girl more vulnerable to other stresses and challenges in her life (Alexander 1999:3-4)

Silberg (1999:225) examined variation in the influence of genetic and environmental risk factors among 182 prepubertal female, 237 prepubertal male, 314 pubertal female and 171 pubertal male **twin pairs**. The impact of life events on depression was particularly evident in the adolescent girls indicating increased heritability for depression in this group and its long-term consistency was mediated primarily by latent genetic factors. She concluded in her research that the greater heritability for depression in pubertal girls, its genetic mediation over time and the increase in genetic variance for life events might be one possible explanation for the emergence of increased depression among pubertal girls and its persistence through adolescence (Silberg 1999:225-232).

Marcotte's (1999:1) article on gender differences in adolescent depression refers to Nolen-Hoeksema and Girgus' (1994) research which proposes that the reasons for the higher rate of depression in adolescent females was that they are more dependent on others for self-worth than men. Women are less assertive, self-confident and have lower expectations with regard to their ability to control important events than men (Marcotte 1999: 1-2).

It has been suggested that poor problem- solving skills are related to depression in female adolescents (Marcotte 1999:3). Learned helplessness greatly affects adolescent girls. For instance, when girls discover that they do not have much control over their environment, they may learn that they are helpless in the situation. A generalised learned helplessness is related to depression in that the expectation that one's responses will be ineffective may produce failure to cope and a susceptibility to depression.

Evidence suggests that female socialisation is more likely than male socialisation to lead to a feeling of learned helplessness, because females are taught helplessness and dependence rather than self-reliance and self-assertion (Lips 1997:311). Therefore, females do not learn to control their environments. Males are more strongly socialised to believe that their responses to a situation make a difference in the outcome. The actions of boys are more likely to have consequences of reward or punishment, whereas the competence of girls is more likely to be met with ambivalence, or ignored altogether. Young girls do not have much control over the power balance between males and females, and may feel helpless to change their place in society (Alexander 1999: 8).

Finally, it is important to note that although women are more likely than men to be seen in treatment and to be diagnosed as depressed, this may not mean in fact that more women are depressed, for several reasons. First, women may simply be more likely than men to seek treatment when depressed: this tendency would make the reported depression rate for women higher, even if the actual male and female rates were equal (Sue, Sue and Sue 1997:342-3). Second, women may be more willing to report their depression to other people. That is, gender differences may occur in self-report behaviours rather than in actual depression rates. Third, diagnosticians or the diagnostic system may be biased towards finding depression among women. And fourth, depression in men may take other forms and thus be given other diagnoses, such as substance dependency (Sue, Sue and Sue 1997:343).

2.7.5. South African factors that influence adolescent depression

The psychological consequences of poverty, deprivation and crime are endless. These include the mental and physical developmental impact of poor nutrition on children and the anxiety, depression and stress-related conditions caused by poor living conditions, violent crime and occupational circumstances. Gradients in physical and mental ill health by socio-economic status are well-recognised (Desjarlais, Eisenberg, Good and Kleinman 1995:22).

2.7.5.1. Adolescent sexual behaviour in South Africa and the threat of AIDS

In June 2000, The United Nations Programme on HIV/AIDS published a global report on the HIV/AIDS epidemic. Some important points published about South Africa's HIV/AIDS crisis were:

- With a total of 4.2 million infected people, South Africa has the largest number of people living with HIV/AIDS than any country in the world (UNAIDS 2000:9).
- Contrary to the West, where relatively few people have died from AIDS, itself a matter of concern, millions are said to have died in Africa; and,
- Contrary to the West, where AIDS deaths are declining, even greater numbers of Africans are destined to die (UNAIDS 2000:12, Altman 2000:1).

According to the United Nations report on the HIV/AIDS epidemic, researchers calculate that by the year 2008, 500 000 South Africans will die of AIDS each year, and that average life expectancy is expected to fall from about 60 years to around 40 years between 1998 and 2008. It is predicted that the impact on South African society will be: (United Nations Programme 2000: 29; Smith 2000:1 and ADEA 2000: 4-6).

- HIV/AIDS will pose significant economic costs to business over time but the macro-economic impact is likely to be limited to a Gross Domestic Product growth rate reduction of about 1 % per annum.
- HIV/AIDS care will become a substantial part of health care spending
- Tuberculosis services and cure rates could deteriorate seriously
- Women will be more burdened by bearing the brunt of infections and care of the infected
- The HIV epidemic will produce large numbers of orphans (by 2005 there will be nearly a million children under the age of 15 who will have lost their mothers to AIDS)

- Education will be affected through staff becoming infected and through increasing needs of affected and infected children.
- Welfare will face the challenge of dealing with those debilitated by AIDS, the numbers of AIDS orphans and the increase in elderly whose adult children die prematurely.
- The majority of South Africans will be affected by this epidemic as it impacts on family members, friends and colleagues.
- Social and political instability may increase.

How does the threat of HIV/AIDS impact on adolescents in South Africa? Some research suggests that whereas adults look at AIDS in fear, it does not seem to be changing the attitudes of the youth of this generation. "This generation are marrying later but are having sex earlier than any previous generation this century. There is also an unprecedented level of cohabitation before marriage, and of "open marriages" after marriage. Sex is certainly not viewed with the puritan glasses of the Christianised past" (Codrington 1998:3-11).

Unwanted adolescent pregnancies are of worldwide concern and the Director General of Health, in 1999, identified teen pregnancies as one of the most critical public health problems in South Africa. Further, the consolidation of the AIDS epidemic has revealed that infection in adolescence constitutes a predominant risk phase, with about 60% of all new HIV infections occurring among 15-24 year olds (Altman 2000:1). In addition, the occurrence of sexually transmitted diseases other than HIV infection is highest among young adults and adolescents, introducing risks for subsequent pelvic inflammatory disease, infertility, premature birth, ectopic pregnancy and several types of cancers.

It is widely acknowledged that patterns of adolescent sexuality have changed during the last three decades, with sexual activity beginning at younger ages than before but without corresponding levels of uptake of protective and health maintaining behaviours. In South Africa, for example, the health issues of unprotected adolescent sexual behaviour are illustrated by the following selected descriptions:

- Sexual behaviour begins early and is most often unprotected
- There is a high rate of unwanted teenage pregnancies
- Young people are at very high risk of HIV infection
- Sexually transmitted diseases, other than HIV, occur at high rates among young people.
- For many reasons, adolescents tend not to use the health services that do exist.

Three recent surveys, have attempted to approach adolescent sexuality and reproductive health, from a broader perspective, incorporating social contextual variables and measures of the complexity of adolescent sexual behaviour over time. In particular, the Richter study stressed the inter-relationship between early sexual debut, multiple partners, sexual violence, the occurrence of sexually transmitted diseases, alcohol and drug use, and gang membership, suggesting the existence of a constellation of behaviours associated with risk for sexual ill health (Altman 2000:1).

2.7.5.2. Crime and Violence

Statistics seem to support the view that South Africa is an extremely violent country. The experience of being violently victimised in South Africa has become a statistically normal feature of everyday life in the urban and rural setting. South African Police Service figures indicate that in 1996 there were a total of 25 782 reported murders, 28 516 attempted murders and 12 860 car hijackings. In terms of sexual violence, there were a total of 50 481 rapes. South African children are not exempt from violence. In 1996, 20 333 crimes of a sexual nature were reported to the Child Protection Units, while there were 8 626 reported assaults of children (Hamber and Lewis 1997:2-6)

The consequences of the high levels of violent victimisation permeate increasingly widely into South African society, and few, if any, South Africans can remain unaffected. Vast numbers of South Africans are likely to struggle to relate to other

individuals due to shattered trust, and feelings of grief and loss; to have difficulty in the workplace due to intrusive trauma symptoms; and to be left with an overwhelming sense of anxiety, anger and vulnerability. This must leave many South Africans, including adolescents, with raised levels of fear, suspicion and aggression - all of which negatively affect their daily functioning (Hamber and Lewis 1997: 2-6).

Today, school violence in South Africa poses a fundamental challenge to the government as it confronts the formidable task of inculcating a "culture of learning" among youth who remain disillusioned and marginalised (Mogano 1993:1).

From 1996 to 1998, girls aged seventeen and under, constituted approximately 40 % of reported rape and attempted rape victims nationally (Hirschowitz, Worku and Orkin 2000:21-24). Twenty % of young women surveyed in southern Johannesburg reported a history of sexual abuse by the age of eighteen. Another recent study investigating sexual violence suggests that there has been a steady increase in the proportion of women reporting having been raped before age fifteen (Andersson, Mhatre, Mqotsi and Penderis 2000:48-59). Those who commit acts of sexual violence can also be very young. Therefore, girls may have real reason to fear the threats and taunts of their classmates.

Melis (2000:9) stated that in Mitchell's Plain, a township community in the Western Cape, up to 40 % of the 950 sexual violence cases recorded in 1999, were reportedly committed by children. Melis stated that she is seeing many more younger perpetrators - school aged children.

Societal attitudes towards women and girls also contribute to a higher incidence of violence. According to a recent Gauteng area study, eight in ten young men believed women were responsible for causing sexual violence and three in ten young men thought women who were raped "asked for it". Two in ten thought she must have enjoyed it. Almost half of the males surveyed said they had sexually violent male friends (Anderson 2000:53).

Nearly 50 % of male youths said they believed a girl who said "no" to sex meant "yes". Nearly a third of both men and women surveyed said forcing sex on an

individual who is known is not sexual violence. Some girls even responded that they did not have the right not to be subjected to sexual violence. While the majority of men thought "jack-rolling" (slang term for gang rape) was "bad", young people between the ages of fifteen and nineteen years old were the most likely to say it was "good" or "just a game". Eleven percent of fifteen-year-old male youth thought jack-rolling was "cool", with a leap in male opinion in favour of jack-rolling between the ages of sixteen and seventeen (Anderson 2000:54).

Youth attitudes regarding violence against girls help perpetuate violence. To date, the education system has not been effective in changing attitudes or teaching students to control aggression; rather, schools are spaces where violence remains prevalent in part because it is not effectively challenged by school authorities.

The culture of violence in South Africa mutates into many forms of trauma. The majority of South African victims of violent crime are likely to feel unsupported and hopeless and to have lost faith in the effectiveness of the criminal justice system. These feelings are likely to intensify if they receive no psychological and social support, and if their first dealings with the criminal justice system, for example, the police, fail to meet their needs (Burke 2000:5).

If ignored, certain victims of past violence are at risk for becoming the perpetrators of retributive violence or displaced social and domestic violence (Malepa 1990:10). The recent trends in increased violence through vigilantism and the ongoing spiral of political revenge and retribution in Kwazulu-Natal, bear testimony to this thesis. This phenomenon has also been observed in child victims of violence. The research of Dawes and Tredoux (1990:8) and Malepa (1990:12) highlight the fact that children exposed to violence will more readily become perpetrators of violence themselves. Similarly, studies have found that women who were beaten were at least twice as likely to beat their children than mothers who were not abused.

How does the threat of violence and crime impact on the emotional health of South African adolescents? If an adolescent has personally experienced violence, or been

affected by crime or violence, the risk of developing anxiety, antisocial or depressive symptoms is high. In a Western Cape school survey of exposure to violence and posttraumatic stress symptoms in adolescents, a positive association was found between exposure to violent and multiple traumas and posttraumatic stress disorder symptoms in adolescents (Seedat; Van Nood; Vythilingum; Stein and Kaminer 2000:1). A recent study in the Cape enabled data to be collected from 78 Grade 7 children living in a high violence community in Cape Town. The results of the survey indicated that a moderate correlation exists between direct exposure to violence and levels of aggression, opposition/defiance and deficits in self-regulation (Van Der Merwe 2000:1).

In the 1997 study of 3870 adults and adolescents conducted by Market Research Africa and the Community Agency for Social Equality, 17 % of people who had been exposed to trauma described their mental health as "poor", versus 2 % of people who had not been exposed to trauma. Of the 23 % of people exposed to violent events, 78 % had one or more symptoms of Post Traumatic Stress Disorder. The study was conducted with face to face interviews (Burke 2000:3).

South Africans are dealing with conditions that are less than perfect. Burke (2000:7) states that mental health is still a second cousin to other types of health. For example, in the Limpopo Province, where there are five million people, there is only one psychologist. Burke (2000:4) says that counselling after exposure to trauma in South Africa should be viewed as a necessity and not a luxury. He states that if people can get healing, and go for counselling and work through their resentment, it is very likely to stop the chance of re-victimisation happening and also to stop the victimised from becoming the perpetrator.

2.7.5.3. Future Prospects

"Immediate action must be taken so that young people are not shut out from the world of work, or from the world of trade unionism", the International Confederation of Free

Trade Unions (ICFTU) said at the opening day of its 17th Congress in Durban, South Africa.

According to a report by the International Labour Organisation on young people and work from 1998, one in three young people in the developing world is jobless. As old economies give way to the new economy, the universal labour absorption rate is declining because the ascendant service sector is less labour intensive than the older agricultural and industrial sectors. "In the developing countries, under employment is making the position endured by young people even more precarious, since there are fewer chances of finding a job and systems allocating employment benefits are virtually non-existent," the ICFTU says in a report called "Youth and Trade Unions: Common Interests". In these developing countries, like South Africa, many young people turn to the informal economy, selling goods or providing services on the streets.

Despite South Africa's relatively stable market - the prospects of job creation are growing dimmer in a country where unemployment affects nearly one of every two economically active adults. Gottschalk states that the agenda should be jobs, jobs, jobs. This cry is echoed by the trade union movement, which wants government in South Africa to invest heavily in infrastructure projects, which will create long-term jobs (Khan 2000:3).

As there is a correlation between higher skills and employment, education of the youth is vital. The ICFTU argues that developing countries like South Africa need to have a youth employment strategy that matches national economic planning. It recommends promoting programmes that prepare young people for the world of work from junior school (Khan 2000: 4).

In summarising three recent studies which were undertaken to better understand how South African adolescents make the transition into the workforce, Jenkins (2000:1) concludes that:

- Education and parental aspiration play important roles in South African's transition into the work force. Not too long ago education was of little value for career opportunities, and socialisation and the family were the main means of transitioning into the work force. Now in post-apartheid South Africa, making the transition into the work force has become less traditional in light of educational changes.
- Even so, the family still plays an important role by positively correlating with academic achievement in school. Therefore, parental aspiration, by increasing academic achievement, might help adolescents ease into the work force by better providing them with more career opportunities (Jenkins 2000:1).

The unwritten contract of job security between employer and employee that had generated loyalty and commitment among the company men and women of yesteryear, is not the same today. Perhaps the most important reason has been a change in managerial mindset that places a low premium on loyalty and a high premium on the bottom line, profit, as if the one is incompatible with the other. South African management, in many cases remains transfixed by this "results before people" approach (Van Zyl Slabbert; Malan; Marais; Olivier and Riordan 1994:85).

Do the lack of job prospects and job security impact on South African adolescents' emotional health? Is there any evidence to suggest that negative future prospects in this country create a sense of hopelessness in adolescents? Some research comments on the pessimism of this generation's adolescents and connects this to the dramatic increase in teen suicides over the past two decades and the increase in self-destructive behaviours (Codrington 1998:5). Other research results indicate that students held a very positive outlook on their future. Students discussed a variety of goals for their future and make it clear that they rely on one another to make sense of their plans for the future (Jenkins 2000: 2).

2.8. Adolescent depression awareness programmes

Several depression awareness projects have been funded and piloted in the United States. "Red Flags" was the title of the programme funded by the Ohio Department of Education (Frese 1996:1). KidsFirst, Green Ribbons, HeadsUp! were all monitored by the National Mental Health Association in the United States. The Columbia Teen Screen Programme is an example of a depression awareness and screening programme, which was effective. It included a 3 - stage assessment process: (Crick 2000:1).

1. Pencil and paper health questionnaire – students with results that indicated signs and symptoms of distress were asked to do a further detailed questionnaire.

2. After completing this assessment, students who were alerted to their depressive symptoms by their high scores and were responsive to receiving further help were asked to participate in an interview with a mental health professional.

3. Interview with mental health professional.

After completing all 3-assessment stages, the Columbia Teen Screen Co-ordinator acted as a case manager, referring students to appropriate organisations or individuals who could assist them. Of 93 students screened during the pilot phase of the Columbia Teen Screen in Tulsa:

- 59% of screened students showed signs of mental distress.
- 40 students had suicidal ideations, endorsed in one of the three evaluation stages.
- 16 students accepted referrals for further mental health services.

A similar 3-stage assessment process could be conducted in South African schools to raise awareness of adolescent depression and to address adolescents' emotional needs timeously.

2.9. Conclusion

South Africa is a developing nation. Its leaders are struggling with unemployment, one of the highest crime rates in the world, and an AIDS epidemic that threatens to swallow the country's limited resources. It is not surprising that the government has not invested much in the mental health of its citizens.

The lack of epidemiological studies into adolescent depression in South Africa is a clear indication of this. However, ignoring the psychological well being of so many disquieted people, including adolescents, will inevitably prove to be costly in terms of unemployment, crime, and the elusive goal of reconciliation. Many adolescents in South Africa do not have to deal with one stress-causing event, but are living in a situation of continuous stress (sometimes even continuous traumatic stress).

This study gives an indication of the prevalence of depressive symptoms amongst adolescents in Johannesburg, South Africa. It gives an indication of whether significantly more males than female adolescents have symptoms of depression and any difference between the intensity of male and female depression. This study gives some indication of which factors, including those particularly relevant to present day South Africa, could be influencing the development of depression symptoms with adolescents today.

Chapter 3 discusses the research design, which was used to measure the symptoms of depression and their relationship to the variables identified in this chapter.

CHAPTER THREE
THE METHOD OF THE EMPIRICAL INVESTIGATION

3.1. Introduction

This chapter looks at the research design used in measuring the symptoms of adolescent depression and its relationship to other variables such as family relations, peer relations, gender, genetics and variables particularly relevant to South Africa, like crime, the threat of HIV and future job prospects. These variables were identified in the literature study.

Certain hypotheses with reference to these variables and adolescent depression are formulated. A brief description of the procedures used to test these hypotheses is given. This includes the selection of the sample, a description of the measuring instruments used, the procedure used in formulating and administering the questionnaires and finally the methods used in analysing the data.

3.2. Hypotheses

The following hypotheses, based on the literature study were formulated.

3.2.1. Hypothesis 1

A similar number of South African adolescents have major symptoms of depression as compared to American adolescents.

3.2.2. Hypothesis 2

Significantly more adolescent girls than boys will be found to be suffering from depression.

3.2.3. Hypothesis 3

Adolescent girls will have more severe symptoms of depression than adolescent boys.

3.2.4. Hypothesis 4

Negative perceptions of family relationships and peer relations will be significant predictors of adolescent depression.

3.2.5. Hypothesis 5

A negative perception of South African life circumstances will have a significant positive correlation to symptoms of adolescent depression.

3.3. Selection of the sample

The sample consisted of 385 Grade 11 adolescents, 114 boys and 271 girls. The average age of the adolescents was 17 years and 4 months. Grade 11 adolescents were chosen as it was preferable to have as high level of education as possible. It was considered too much of an interruption to use Grade 12 adolescents.

A Research Request Form was completed by the researcher and submitted to the Gauteng Department of Education. This was required in order to conduct research in the Gauteng Department of Education Schools. After a delay of approximately six weeks, permission

was duly granted and the research went ahead. Permission to conduct research was also granted from all the Heads of the identified schools.

The adolescents were selected from an elite private school, a co–educational government school in a middle socio-economic environment, a government school in a low socio-economic environment and a government school in a very low socio-economic environment. The sample could be said to be representative of the adolescent population in the greater Johannesburg area.

The private school identified insisted that parental permission was obtained before their Grade 11 pupils could be part of the sample. The Government schools only insisted upon Gauteng Department of Education permission. However, pupils were told that completing the questionnaire was voluntary and would be totally anonymous.

3.4. Measuring instruments used in the investigation

A summary of the variables measured and the measuring instruments used to measure these variables are given in table 3.1. A detailed description follows after the table.

TABLE 3.1: Variables measured and the measuring instruments

Variables	Measuring Instruments
1. Symptoms of Adolescent Depression	**Goldberg Depression Inventory (see page 98 of Appendices)**
2. Causative Factors, including peers, family, gender, genetics and South African factors	**Adolescent Life Perspective Questionnaire (see page 102 of Appendices)**

3.4.1. The development of a measuring instrument to measure an adolescent's perspective of important aspects of his or her life

3.4.1.1. Introduction

It was stated in chapter 2 that certain models of adolescent depression measure family relations, peer relations, negative gender socialisation or genetic predisposition as a prime variable. However, few studies have attempted to investigate and compare the links between adolescent depression and the above variables as well as factors particularly relevant to South Africa, like crime, perspective of the future and the threat of contracting HIV. As a result, no questionnaire existed for South African adolescents that measured all of these variables.

It was therefore decided that a questionnaire would be developed that would measure the adolescent's perception of life – including his or her perception of his or her family and peer relations, genetic predisposition to depression, negative gender socialisation and attitude to living in South Africa today.

3.4.1.2. The structure of the Goldberg Depression Scale

(i) Initial considerations

Certain considerations needed to be taken into account when selecting a measuring instrument that measures symptoms of adolescent depression. This questionnaire should be a validated depression scale (Holm, Holm and Bech 2001:263-266). It should be age appropriate, not too time consuming, should be easy to complete and have clearly understandable language. It should also be suitable for group administration. The Goldberg Depression Scale was found to meet these criteria, but certain adaptations were needed.

(ii) Adaptations needed

Each item on the Goldberg Depression Scale has both a negative and a positive pole with a scale of 0 to 5 ranging in-between. The wording, which defined the scores within this range, was thought to be a little difficult for some South African adolescents to understand. This could affect their answers. They could be more inclined to choose from the words they understood, rather than distinguishing between the words and accurately selecting the word which best matched their feelings and behaviours.

The following words were amended:

- Somewhat (Scoring 2) was changed to Sometimes
- Moderately (Scoring 3) was changed to Often
- Quite a lot (Scoring 4) was changed to A lot

The range in between was therefore not amended, as there was still a progression from less to more.

Other words amended:

- Question 6 : "aspects of life" was changed to "some things in life"
- Question 8: "agitated" was changed to "upset and worried"

3.4.1.3. The structure of the Adolescent Life Perspective Questionnaire

(i) Initial Considerations

In constructing the measuring instrument, which attempts to assess adolescents' perspectives of their relationships, gender and genetic influences on their mental health and their perspective on South Africa, certain considerations, were taken into account.

Firstly, the instrument should not be too time-consuming. The instrument would be used in conjunction with the depression questionnaire and should therefore not be too long.

Secondly, the instrument should be flexible in that it should be possible to use in an individual or group test situation – once again the time factor is of importance.

Thirdly, the instrument should be of such a nature that any school guidance counsellor; psychometrist or psychologist should be able to administer without having any specific training in the test. Therefore the administering and the interpretation of the instrument should not be too complicated.

For the above reasons, it would seem that an interview or any other descriptive method would not be practical as it would be too time consuming, not conducive to a group testing situation and standardisation and objectivity would be very difficult to achieve.

A questionnaire, which makes use of dichotomous answers, would appear to be the most appropriate instrument in this instance. It would be possible to use it in a group situation and the administering and interpretation would not be too difficult.

(ii) Final Structure

It was thus decided to construct and use a questionnaire with the following characteristics:

- The main causative factors of adolescent depression as identified in Chapter 1 and 2 were used in the development of the questionnaire. They were:

1. Negative family relations
2. Negative peer relations
3. Genetic predisposition
4. Negative Gender Socialisation
5. Negative perspective of factors specific to the South African context, such as:

- The threat of contracting HIV

- The threat of falling victim to crime
- Negative perspective of future prospects within South Africa

The five factors originally identified, were analysed and 10 items for each of these factors were developed.

- Each item has both a positive and a negative answer with a score of 0 or 1. Negative and positive responses (Yes/No) could score 0 or 1 with particular questions depending on whether a particular response was deemed to be a contributing factor to emotional well being or not. Varying the positive / negative dependency on Yes / No answers, made it very difficult for an adolescent to choose a certain response habitually.

3.4.1.4. The development of items for the measuring instrument

(i) Factor 1 : Perception of Family Relations

The items in this section help to answer the following question

- To what extent does the individual perceive his or her relations with his or her family in a positive light? To what extent does he or she feel loved, supported and valued by his or her family?

An example of one of these items is:

Question 1: Is your family supportive of you?

(ii) Factor 2: Perception of Peer Relations

The items in this section help to answer the following question

- To what extent does the individual perceive his or her relationship with his or her peers in a positive light? To what extent does he or she feel liked, valued and respected by his or her peers?

An example of one of these items is:

Question 45: Do you feel rejected by people your own age?

(iii) Factor 3: Perception of Gender

The items in this section help to answer the following question

- To what extent does the individual perceive that his or her gender has a positive or negative impact on his or her life? To what extent are they expected or not allowed to do certain things because of their gender?

An example of one of these items is:

Question 39: Are you not allowed to do certain things because you are a boy/girl?

(iv) Factor 4: Perception of Genetic Predisposition

The items in this section help to answer the following question

- Is there a genetic history of depression in the family?

An example of one of these items is:

Question 21: Has your mother ever been depressed for more than two weeks?

(v) Factor 5: Perception of Life in South Africa

The items in this section help to answer the following question

- To what extent does the individual perceive the living environment in South Africa in a negative or positive light?

An example of one of these items is:

Question 44: Has the threat of getting HIV affected your enjoyment of life?

TABLE 3.2 ITEM NUMBERS FOR EACH OF THE FACTORS

FACTOR	**ITEM NUMBERS**
FAMILY	Questions: 1, 6, 14, 19, 26, 29,33, 36, 37, 49
PEERS	Questions: 2, 7, 9, 15, 20, 25, 30, 41, 45, 48
GENETICS	Questions: 3, 10, 11, 16, 21, 22, 27, 31, 32, 50
GENDER	Questions: 4, 8, 13, 17, 23, 35, 39, 40, 43, 46
SOUTH AFRICAN	Questions: 5, 12, 18, 24, 28, 34, 38, 42, 44, 47

The Adolescent Life Perspective Questionnaire (ALPQ) was found to assist in measuring:

(i) The symptoms, diagnosis and influential factors of adolescent depression.

(ii) The extent to which possible factors were influencing the development of adolescent depression symptoms.

The ALPQ was found to be informative and was simple to administer and score. It was found to be of use to the teacher or counsellor for the following reasons:

- It allows the teacher or counsellor to assess the problem areas of the adolescents in their school and to develop the curriculum and life skills programmes to address these problem areas;

- The five major influential factors, namely family, peers, gender, genetic influence and issues pertinent to South African adolescents could be measured separately.

Further related questions were whether significantly more females than males have depression symptoms, and whether negative gender socialisation or genetic predisposition had a significant influence on depression symptoms were also answered by the empirical investigation.

3.4.1.5. Instructions accompanying the measuring instrument

The adolescents selected for the sample received two questionnaires, stapled together (so that the two questionnaires could later be correlated). The Goldberg Depression Scale (Appendix A. See page 98), was to be answered first, followed by the Adolescent Life Perspective Questionnaire (Appendix B. See page 102). The adolescents were asked to follow the instructions given to them verbally and to ask questions if they did not understand. The fact that they had to mark their answers on the questionnaire was emphasised.

3.4.1.6. Key to the measuring instruments

(i) Goldberg Depression Scale (Appendix A. See page 98)

The measurement of depression

Each item consists of a statement, which the adolescent has to respond to on a scale from Not at All to All the Time. Scoring was as follows:

SCORING OF QUESTIONS:

Not at all	Just a little	Sometimes	Often	A lot	Very much
0	1	2	3	4	5

The Goldberg Depression Scale was scored. Scores, which exceeded 22, were considered noteworthy of major symptoms of depression. A validation study on the Goldberg Depression Scale regards the cut-off score for major symptoms of depression as 22 and full remission is a score of 9 (Holm, Holm and Bech 2001:263-266).

The Goldberg Depression Scale marking score ranks scores between 22 and 35 as an indication of mild to moderate depression. Scores between 36 and 53 are ranked as an indication of moderate to severe depression and 54 and above as an indication of severe depression.

Total scores were calculated and assigned to the appropriate category:

TOTAL SCORE CATEGORIES:

0 to 9	10 to 17	18 to 21	22 to 35	36 to 53	54 -
No depression likely	Possible mild depressive symptoms	Borderline depressive symptoms	Mild to moderate depressive symptoms	Moderate to severe depressive symptoms	Severe depressive symptoms

ii) The measurement of the factors on the Adolescent Life Perception Questionnaire (see page 102)

Each item consists of a statement to which the adolescent has to respond positively or negatively (Yes / No)

The Adolescent Life Perspective Questionnaire was scored using +1 when the question was given a negative response. A negative response could be a **Yes** or **No** answer, depending on the type of question. A table was created which listed each variable in a

separate column and the scores were inserted into the appropriate column for each variable.

3.4.2. Correlation of the two questionnaires.

Depression questionnaires with a significant score of 22 or above were then correlated with the factors measured on the Adolescent Life Perspective Questionnaire. A Multivariate Correlation Matrix was drawn and correlation scores were noted.

3.4.3. Reliability and validity of the Goldberg Depression Scale

The Goldberg Depression Scale is designed to be used as a self-report tool or a client-report tool. The scores on this test are not meant to be used as a diagnosis of clinical depression. It is a useful indicator as to whether an individual has symptoms of depression or not, and if so, to what extent. Under the heading Score Interpretation it clearly states that a trained mental health professional needs to make a diagnosis of depression. A mental health professional also needs to be consulted if the individual is experiencing depressive feelings and/or difficulties in their daily functioning as a result of anxiety or worry.

A validation study of the Goldberg Depression Scale found inter-rater reliability in using the Scale was adequate, with a mean score of 22.2 and a standard deviation of 2.7 (absolute values 17-25) (Holm, Holm and Bech 2001: 265). The internal validity of the Scale was acceptable and the results indicated that the 18 items on the scale have a valid rank order and structure. External validity was measured by correlating the mean scores on the Goldberg Depression Scale to the mean scores on the Hamilton Depression Scales. A coefficient of 0.74 was obtained ($p<0.0001$).

3.4.4. Reliability and validity of the Adolescent Life Perspective Questionnaire

A determined effort was made to give equal weighting to each variable and to accurately question what was being investigated. Once the questionnaire had been designed, a sample of 10 St Stithians College Grade 11 boys was selected and asked to complete the questionnaire. They completed the questionnaire in approximately fifteen minutes. Only one query was made. This query was about question 30: Do people your own age enjoy spending time with you? A grade 11 boy asked how he could know how his friends felt about spending time with him, without asking them.

It was explained that the questionnaire measured his perceptions and was asking what he thought and felt. What was his sense of whether his friends enjoyed his company? It was measuring his self-knowledge. This question was of benefit in the later administration of the test. The tester included in her instructions the point that the individuals were to answer the questionnaire according to their internal thoughts and feelings. The above queried question was in fact used as an example to explain this.

3.5. Procedure followed during the empirical investigation

Adolescents were tested in large groups. They were seated individually and given pencils and erasers where necessary. Instructions were then given as to how to answer each questionnaire and what details needed to be filled in. It was explained that after the test had been administered an explanation of what had been measured would be given to them. This explanation was not given prior to the administration, so as not to influence their answering of the questionnaires. Time was given for questions to be asked. It was emphasised that there should be no talking or consultation with their classmates during the administration of the test.

Once the questionnaires had been completed and collected, an explanation of what had been measured was given and assurances were given that a report back on the results would be given once the research had been completed.

3.6. Processing of the results

Each depression questionnaire was scored and a letter on the right hand corner of the page marked the school from where the questionnaire came.

The Schools used have not been named for reasons of confidentiality, but are available to other researchers if required.

Depression questionnaires were then placed in order from highest to lowest scores. Scores were interpreted and placed into their appropriate category. Only those depression questionnaires with a score, which exceeded 22, were used for further analysis of the Adolescent Life Perception Questionnaires. The perceptions of adolescents on the five variables measured: Family relations; Peer relations; Gender perceptions; Genetic history and Perceptions about South Africa were therefore correlated with those individuals who had mild, moderate or severe symptoms of depression.

3.7. Testing of the hypotheses

The following hypotheses, based on the literature study, were formulated

3.7.1. Hypothesis 1:

A similar number of South African adolescents have major symptoms of depression as compared to American adolescents.

The cut-off score for major depression was 22, as a validation study on the Goldberg Depression Scale (Holm, Holm and Bech 2001:20) indicated that this would be the correct score at which to regard the symptoms of depression as major.

The number of adolescents scoring 22 or higher on the Goldberg Depression Scale, was expressed as a percentage. The percentage of depressed adolescents from the entire sample was also calculated

.

Rationale:

From the literature study it was found that the number of adolescents who have symptoms of depression, elsewhere in the world alarms medical practitioners and the general public. Two recent epidemiological studies in America have estimated that about 10% of the general population of America is depressed at present and that greater than 20% of adolescents in the general population of America major symptoms of depression (Goldberg in Cooper 1996:1).

There appears to be little if any research into the epidemiology of adolescent depression in South Africa. This research study hopes to ascertain whether a smaller, larger or similar percentage of adolescents in South Africa have symptoms of depression as compared to America.

3.7.2. Hypothesis 2:

Significantly more adolescent girls than boys will be found to be suffering from depression

The means of the scores of the total number of female and male adolescents scoring 9 or higher on the Goldberg Depression Scale (full remission of depression is a score of 9 or lower) were calculated and the difference between the means was calculated by using a t-test. The spread of the data was then evaluated by testing whether the medians of the two distributions of scores are equal or whether there is a significant difference between the medians.

3.7.3. Hypothesis 3

Adolescent girls will have more severe symptoms of depression than adolescent boys will.

The means of the scores of the total number of female and male adolescents scoring 22 or higher on the Goldberg Depression Scale were calculated (the cut-off score for major symptoms of depression is 22, according to the validation study conducted by Holm, Holm and Bech 2001: 263-266). The statistical difference in the severity of depression between males and females was calculated by looking at the difference between the means of males and females (calculated by using a t-test).

3.7.4. Hypothesis 4:

Negative perceptions of family relationships and peer relations will be significant predictors of adolescent depression.

A correlation matrix was calculated and the correlation coefficient between family relations and depression scores and peer relations and depression scores were compared. Multivariate correlations were also calculated so that the correlation between all the input variables could be checked.

3.7.5. Hypothesis 5:

A negative perception of South African life circumstances will have a significant positive correlation to symptoms of adolescent depression.

A correlation matrix was calculated and the correlation coefficient between South African factors and depression scores was calculated. Multivariate correlations were also calculated so that the correlation between input variables could be checked. In other words South African factors independence/dependence on the other input variables.

The average scores attributable to the South African environment were expressed as a percentage of the sum of the scores for all five factors. These percentages were then compared.

CHAPTER 4
RESULTS OF THE INVESTIGATION

4.1. Introduction

A number of causative factors of adolescent depression were identified in the literature study (see pages 18 to 47). Although many of these factors had formed part of previous research on adolescent depression, it was decided that a new instrument would be developed in order to include some of the possible causative factors of depression among South African adolescents today.

In order to assess the significance of these factors, the Goldberg Depression Scale (GDS) and the newly developed Adolescent Life Perspective Questionnaire (ALPQ) were administered to 385 adolescents. Each adolescent's age and gender was also obtained. A sample of 142 (out of the original 385) was then specifically selected for further analysis, because their scores on the adolescent depression questionnaire were higher than 22. The cut-off score for major symptoms of depression is 22, according to the validation study conducted by Holm, Holm and Bech (2001:263-266). For this specific sample, the ALPQ was analysed according to each of the five factors and this factor analysis was correlated with their GDS scores.

0 to 9	10 to 17	18 to 21	22 to 35	36 to 53	54 -

No depression likely	Possible mild depressive symptoms	Borderline depressive symptoms	Mild to moderate depressive symptoms	Moderate to severe depressive symptoms	Severe depressive symptoms

4.2. Results of Goldberg Depression Scale (GDS)

4.2.1. Government School in Soweto – 99 Grade 11 girls

No Depression	**Non-significant Depression**	**Borderline Depression**	**Mild/Moderate Depression**	**Moderate/Severe Depression**	**Severe Depression**
17	41	10	20	8	3

Thirty-one Grade 11 girls from a Girls School in Soweto scored above 22 on the GDS. These girls were therefore selected for factor analysis using their Adolescent Life Perspective Questionnaire (ALPQ) scores.

4.2.2. Combined School in Diepsloot – 33 grade 11's 19 girls and 14 boys

No Depression	**Non-significant Depression**	**Borderline Depression**	**Mild/Moderate Depression**	**Moderate/Severe Depression**	**Severe Depression**
3	7	7	9	6	1

Sixteen Grade 11 girls and boys from a Combined School in Diepsloot scored above 22 on the GDS and were therefore selected for factor analysis using their ALPQ scores.

4.2.3. Private Boys' College in Randburg – 31 grade 11 boys

No Depression	Non-significant Depression	Borderline Depression	Mild/Moderate Depression	Moderate/Severe Depression	Severe Depression
3	7	7	8	6	0

Fourteen Grade 11 boys from a private Boys College scored above 22 on GDS. These fourteen boys were therefore selected for factor analysis using their ALPQ scores.

4.2.4. Private Girls' College in Randburg – 73 grade 11 girls

No Depression	Non-significant Depression	Borderline Depression	Mild/Moderate Depression	Moderate/Severe Depression	Severe Depression
11	28	6	18	8	2

Twenty eight Grade 11 girls from a private Girls College scored above 22 on the GDS and therefore formed part of the sample chosen for factor analysis using their ALPQ scores.

4.2.5. Government School in Boksburg - Boys – 69 Grade 11 Boys

No Depression	Non-significant Depression	Borderline Depression	Mild/Moderate Depression	Moderate/Severe Depression	Severe Depression
15	23	13	13	4	1

Eighteen Grade 11 boys from a government school in Boksburg scored above 22 on the GDS, were selected for factor analysis using their ALPQ scores.

4.2.6. Government School in Boksburg - Girls – 80 Grade 11 Girls

No Depression	Non-significant Depression	Borderline Depression	Mild/Moderate Depression	Moderate/Severe Depression	Severe Depression
15	21	9	26	8	1

Thirty-five Grade 11 girls from a government school in Boksburg scored above 22 on the Goldberg Depression Scale. They formed part of the sample of adolescents selected for factor analysis using their ALPQ scores.

4.3. Results of the Adolescent Life Perspective Questionnaire for adolescents who scored above 22 on the Goldberg Depression Scale

See Appendix C (page 105) for the detailed results of the Adolescent Life Perspective Questionnaire.

4.4. Interpretation of the data

The questionnaires were administered to 385 adolescents. 63.12% of these adolescents obtained a score of less than 22 on the Goldberg Depression Scale. Therefore their scores

were non-significant with regard to depression symptoms (In the chart below, they are indicated in blue as "Not Depressed". 36.88% of the adolescents obtained a score of 22 and above, thus scoring in the mild, moderate or severe range of depression symptoms. Of these, 24.42% scored in the mild to moderate range of depression symptoms and 12.47% of the adolescents obtained a score which fell within the moderate/severe to severe range of depression symptoms. See Chart below.

TABLE 4.1 PREVALENCE OF DEPRESSION IN SAMPLE

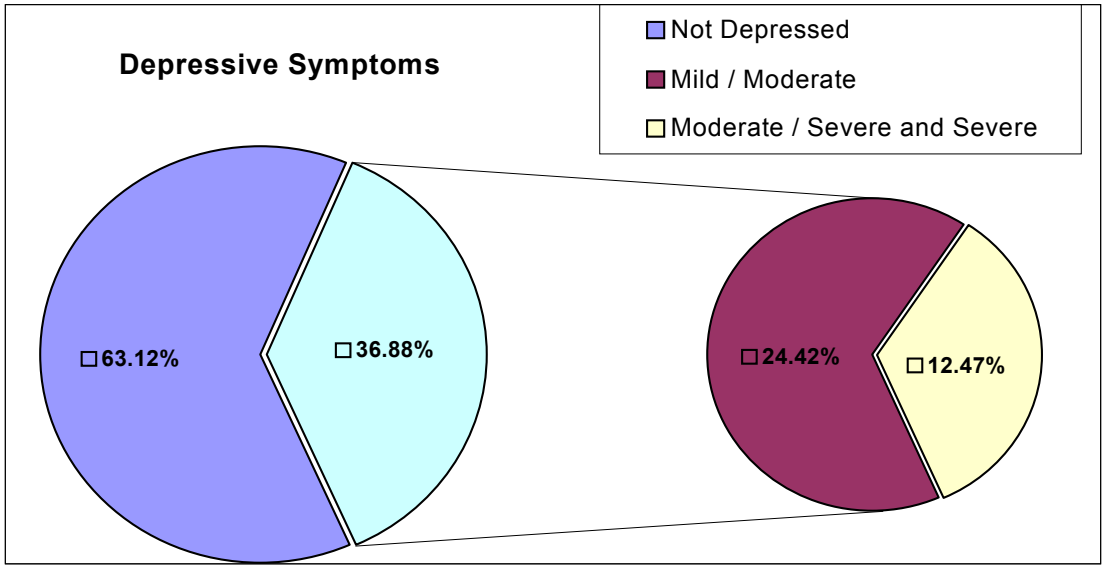
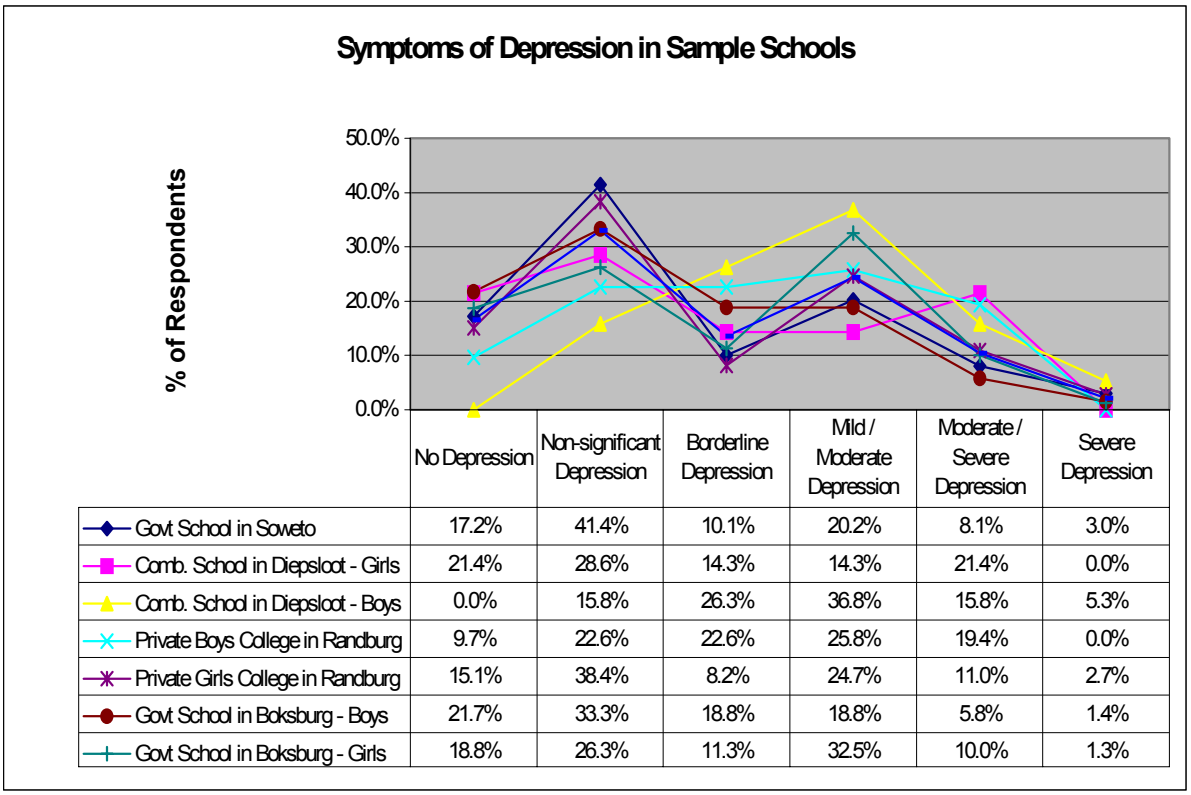


TABLE 4.2 PREVALENCE OF DEPRESSION BY SCHOOL



	No Depression	Non-significant Depression	Borderline Depression	Mild / Moderate Depression	Moderate / Severe Depression	Severe Depression
Govt School in Soweto	17.2%	41.4%	10.1%	20.2%	8.1%	3.0%
Comb. School in Diepsloot - Girls	21.4%	28.6%	14.3%	14.3%	21.4%	0.0%
Comb. School in Diepsloot - Boys	0.0%	15.8%	26.3%	36.8%	15.8%	5.3%
Private Boys College in Randburg	9.7%	22.6%	22.6%	25.8%	19.4%	0.0%
Private Girls College in Randburg	15.1%	38.4%	8.2%	24.7%	11.0%	2.7%
Govt School in Boksburg - Boys	21.7%	33.3%	18.8%	18.8%	5.8%	1.4%
Govt School in Boksburg - Girls	18.8%	26.3%	11.3%	32.5%	10.0%	1.3%

4.4.1. Gradient of symptoms of depression: by school

By analysing the symptoms of depression range, by school, it is possible to establish that the pattern of depressive symptoms is similar in most schools. Only Diepsloot Girls and St Stithians Boys show some deviation from this pattern.

The responses generally fell on either side of the **Borderline Depression** range, with a peak in the non-significant category and, on the significant side of the scale, a large number in **Mild/Moderate** and **Moderate/Severe**.

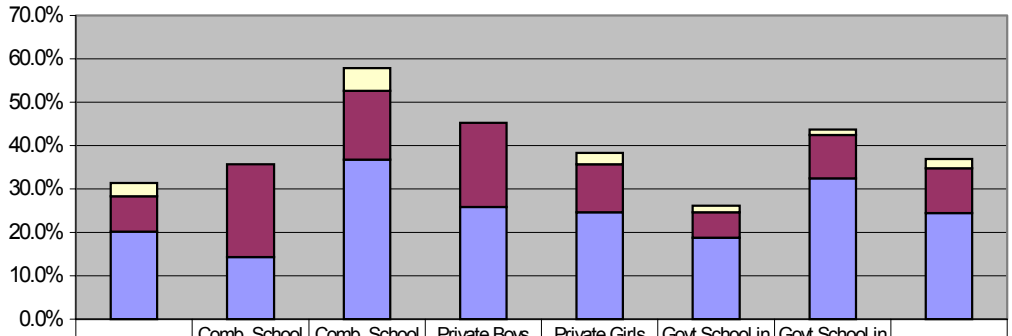
Severe depressive symptoms appeared in, on average, 2.1% of the sample. In the case of Diepsloot Girls and St Stithians Boys, non-significant depression was relatively lower than for the other schools, with a correspondingly higher ratio of significant depression scores. This suggests that the incidence of depression could be higher at either end of the socio-economic spectrum, as these schools serve very poor and affluent sectors of society, respectively. The researcher was anticipating that the rate of depression would be higher in the lower socio-economic sector only, as many studies suggest that depressive symptoms are more prevalent in lower than higher socio-economic status groups (Stansfield 2001:1). This higher prevalence is normally explained by the stress hypothesis, where stress is conceptualised as an imbalance between demands and resources and effective coping with stresses depends on having both environmental and personal coping resources (Stansfield 2001:1).

The higher prevalence of significant depression symptoms that was also noted in the higher socio-economic sector in this research could be explained by the following points:

- The incidence of drug and alcohol use was also higher in this group. As stated in Chapter 1, there is circular relationship between alcohol/drug use and depression (Myers and Parry 2001:1-3). A study recently done in Russia and the U.S.A discovered that those who are wealthy or aspire to be wealthy, watch more T.V. and are more frequent users of drugs and alcohol (Braziel 2001:33).

- The fact that this particular sample was small (31, Private Boys College Grade 11 adolescents) and this can limit the validity of the results.

TABLE 4.3: Significant Depression Scores
Comparison by School



	Govt School in Soweto - Girls	Comb. School in Diepsloot = Boys	Comb. School in Diepsloot = Girls	Private Boys College in Randburg	Private Girls College in Randburg	Govt School in Boksburg - Boys	Govt School in Boksburg - Girls	Average
Severe Depression	3.0%	0.0%	5.3%	0.0%	2.7%	1.4%	1.3%	2.1%
Moderate / Severe Depression	8.1%	21.4%	15.8%	19.4%	11.0%	5.8%	10.0%	10.4%
Mild / Moderate Depression	20.2%	14.3%	36.8%	25.8%	24.7%	18.8%	32.5%	24.4%

4.4.2. Significant depression symptoms: schools compared

As indicated in the table above, the highest percentage of adolescents scoring in the **Severe Depressive Symptoms** range was at the Combined School in Diepsloot - Girls (5.3%), followed by the Girls school in Soweto (3.0%) and the private Girls College (2.7%). It is interesting to note therefore that the gender factor was very evident in the prevalence of severe depression. In Chapter 2 it was stated that literature points clearly to the incidence of depression being significantly higher for girls than for boys during adolescence (see pages 37 to 40). From this one might deduce that prevalence of *severe* depression could also be higher among girls.

The highest percentage of adolescents scoring in the **Moderate/Severe Depressive Symptoms** range was at Diepsloot Combined School – Boys (21.4%), followed by St Stithians Boys College (19.4%) and Diepsloot Combined School – Girls (15.8%). The highest percentage of adolescents scoring in the **Mild/Moderate** range was at the Combined School in Diepsloot– Girls (36.8%), followed by the government school – Girls (Boksburg) (32.5%) and Private Boys College (Randburg) (25.8%).

4.4.3. Correlation between factors and depression scores

TABLE 4.4. THE PAIRWISE CORRELATION COEFFICIENT

Correlation Matrix	Family relations	Peer relations	Genetics	Gender	S/African factors	Depression score
Family relations	1.0	0.240992	0.543151	0.183129	0.116014	0.315791
Peer relations		1.0	0.227152	0.22294	0.035946	0.423844
Genetics			1.0	0.111844	0.009031	0.265017
Gender				1.0	0.055329	0.047166
S/African Factors					1.0	0.050768
Depression Score						1.0

4.4.4. Possible causative factors

i) Gender Factors

It was anticipated that a negative perception of issues surrounding gender would prove to be a causative factor of depressive symptoms for girls. However, the gender questions gave rise to negative responses from both boys and girls. In further analysing the potential reasons for this, the researcher realised that certain items that were designed to measure a negative perception of gender were possibly culturally biased.

For example, **Question 13: Do you feel you can solve problems by yourself?** was designed to measure whether girls felt they could problem solve and control their environment independently. Lack of the belief that one can problem solve independently has been found to be of significance amongst depressed adolescent girls. In Chapter 2, research suggests that female socialisation is more likely than male socialisation to lead to a feeling of learned helplessness, because females are taught helplessness and dependence rather than self-reliance and self-assertion. Therefore, females do not learn

to control their environments (Lips 1997: 7). In retrospect, however, culture should have been taken into consideration as an extremely high percentage of African males answered this question negatively. The concept of "ubuntu" within this culture, does not promote problem solving independently. In fact, the ability to control one's environment independently might not necessarily be proclaimed as a worthy characteristic.

Similarly, **Question 17: Do you have to take care of others in your family?** Was designed to measure whether girls were more socialised into a care-taking role than boys. However, a high percentage of African males answered this question positively. Culturally, males and females within this sector of society take care of both older and younger members of their families.

Therefore, the Gender factor was possibly over-emphasised because other cultural norms may not have been taken into account.

ii) Family Factors

It was anticipated that a negative perception of one's family relations would have a significant correlation to significant symptoms of depression. Questions measured family cohesion and a nurturing and supportive family climate, rather than the structure of the family.

Results show that a significant number of the adolescents in this research sample perceived their family cohesion negatively. These results concur with other research. In Chapter 2, it is stated that McKeown, Garrison and Jackson (1997:270) hypothesised that higher levels of perceived family cohesion are associated with lower levels of depressive symptoms in adolescents, independent of family structure. The results of their study supported their hypothesis: perceived emotional bonding in the family was a stronger predictor of depressive symptoms than the particular family structure.

iii) South African Factors

The results of this research indicate that rumination about and a negative perception of future prospects, fear of crime and violence and the threat of contracting HIV/AIDS in South Africa, have a significant correlation to symptoms of adolescent depression. This supports what is stated in Chapter 2: that the AIDS epidemic has revealed that infection in adolescence constitutes a predominant risk phase, with about 60% of all new HIV infections occurring among 15-24 year olds.

In Chapter 2 it was also stated that due to the high crime and violence rates in South Africa, vast numbers of South Africans are likely to struggle to relate to other individuals due to shattered trust, and feelings of grief and loss. They are also likely to have difficulty in the workplace due to intrusive trauma symptoms; and to be left with an overwhelming sense of anxiety, anger and vulnerability. This must leave many South Africans, including adolescents, with raised levels of fear, suspicion and aggression - all of which negatively affect their daily functioning (Hamber and Lewis 1997:2-6).

In terms of attitudes towards future prospects, Chapter 2 revealed that there is contradictory research. Some research comments on the pessimism of this generation's adolescents and connects this to the dramatic increase in teen suicides over the past two decades and the increase in self-destructive behaviours (Codrington 1997:5). Other research results indicate that students held a very positive outlook on their future. Students discussed a variety of goals for their future and make it clear that they rely on one another to make sense of their plans for the future (Jenkins 2000:2). The results of this research sample reveal that there is some contradiction in attitudes towards future prospects within South Africa.

The table below shows that whilst many adolescents answered positively to:

Question 47: Do you look forward to being an independent adult in South Africa?,

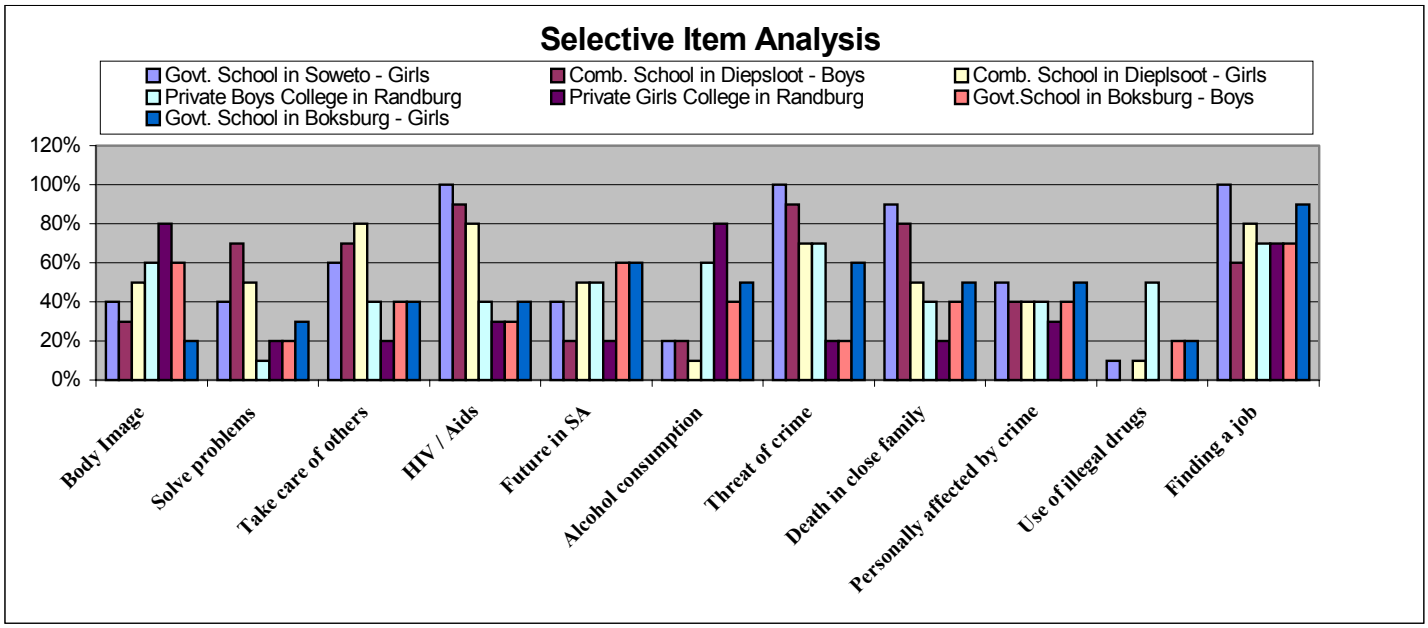
a very high and consistent percentage of adolescents also answered positively to:

Question 42: Do you worry about finding a job when you leave school?

4.4.5. Items of interest

During the analysis of the Adolescent Life Perspective Questionnaire, it became apparent that several specific items might give greater insight into psychosocial make up of the adolescent. See table below.

TABLE 4.5 ITEMS OF INTEREST



The items further examined were the following:

- Question 8: Do you feel ashamed or embarrassed about your body?
- Question 13: Do you feel you can solve problems by yourself?
- Question 17: Do you have to take care of others in your family?
- Question 18: Do you worry about getting infected with the HIV virus?
- Question 24: Do you feel hopeful about your future in South Africa?
- Question 25: Do you and your friends drink alcohol often?
- Question 34: Has the threat of crime caused you to stop trusting people?

- Question 36: Has anyone in your close family died in the last two years?
- Question 38: Have you been personally affected by crime?
- Question 41: Do you and your friends use illegal drugs?
- Question 42: Do you worry about finding a job when you leave school?

It is noteworthy that the threat of HIV, the threat of crime and the death of a close family member, were all of highest significance in the more deprived schools in lower socio-economic areas (in Soweto and Diepsloot). Worry about finding a job was of significance to the adolescents in all schools. Use of illegal drugs was highest amongst males in an affluent socio-economic area. A negative body image was highest amongst girls in an affluent socio-economic area. This supports other research results, which showed that females tend to show certain symptoms of depression more often than boys do, such as poor body image (Nolen-Hoeksema 1990:42). This suggests that educators and parents need to place more emphasis from an early age on girls being hardworking, independent and smart, rather than allowing girls to grow up defining themselves only by their appearance (Rimm 1999:56).

Consumption of alcohol was higher among males and particularly females in the more affluent schools in higher socio-economic areas. The use of alcohol amongst adolescents in this study is concerning. Whilst much is being done to educate teachers, parents and children about illegal drugs, more prevention measures and awareness of alcohol abuse seem necessary. Because alcohol is a socially acceptable substance amongst adults, there could be a tendency to believe its use is harmless among adolescents. In fact research shows that drinking is related to an increase in social crimes and alcohol-related accidents are the leading cause of death among young people between fifteen and twenty-four. Girls, who are drunk, are also more likely to be raped or assaulted (Goleman 1996:253; Grimbeek and Banda 2002:1).

4.5. Do the results of the research support/reject the hypotheses stated in Chapter 3

Hypothesis 1:

A similar number of South African adolescents have major symptoms of depression as compared to American adolescents.

The questionnaires were administered to 385 adolescents. Of these adolescents, 147 had depression scores of 22 and above. Expressed as a percentage this amounts to 38% (just over one third) of the total number of adolescents showing mild to severe indicators of depression symptoms.

As stated in Chapter 1, epidemiological research into adolescent depression in South Africa is extremely limited. A number of recent American epidemiological studies have reported that up to 2.5% of children and 8.3% of adolescents in the U.S.A suffer from depression (Birmaher; Ryan and Williamson 1996:1427-39). Some recent studies in America have shown that greater than 20% of adolescents in the general population of America have emotional problems and one third of adolescents attending psychiatric clinics suffer from depression. It should be noted that depression in this age group is under-diagnosed and reported because the classic indicants of depressive illness can be less obvious in adolescents (Weller and Weller 1984:38).

This study indicates a greater prevalence of major symptoms of depression among adolescents living in the greater Johannesburg area, than among American adolescents.

Hypothesis 2

Significantly more adolescent girls than boys will be found to be suffering from depression.

With regard to Hypothesis 2, stated in paragraph 3.2.2, the following **null hypothesis** was tested: **There is no significant difference between the number of girls and boys found to have moderate to severe symptoms of depression**.

The questionnaires were administered to 114 Grade 11 boys. 37 of these boys' scores fell within the significant range of mild to severe depression symptoms. The questionnaires were administered to 271 Grade 11 girls. 105 of these girls' scores fell within the mild to severe depression symptom range. Some research indicated that before the age of 11, girls and boys seem to have fairly equal depressive rates (Koenig 1994:34 and Alexander 1999:1-2).

In 2.6.4 Gender Factors, it is also noted that: -

- Women may simply be more likely than men to seek treatment when depressed: this tendency would make the reported depression rate for women higher, even if the actual male and female rates were equal (Sue, Sue and Sue 1997:342).

- Women may be more willing to report their depression to other people. That is, the gender differences may occur in self-report behaviours rather than in actual depression rates.

- Diagnosticians or the diagnostic system may be biased towards finding depression among women (Sue, Sue and Sue 1997:343).

- Depression in men may take other forms and thus be given other diagnoses, such as substance dependency (Sue, Sue and Sue 1997: 343).

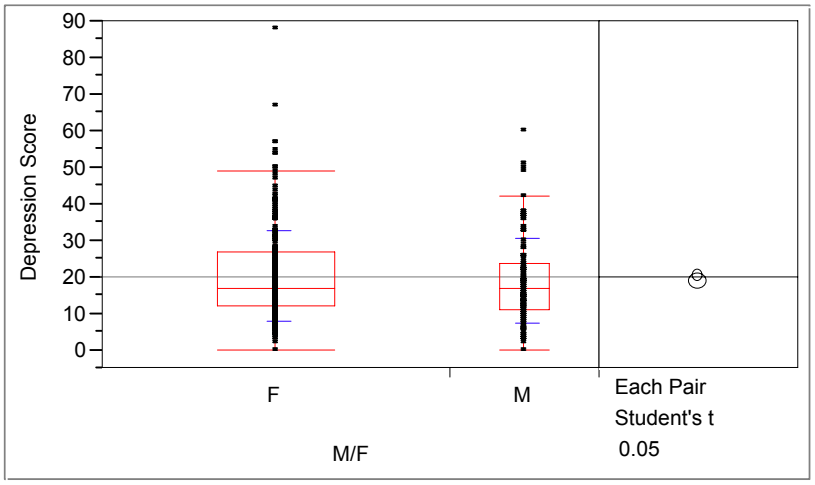
The results of this study do not support the hypothesis that more girls than boys display mild to severe symptoms of depression. A t-test revealed that there was no statistical difference between the means of males and females with mild to severe symptoms of depression.

Calculated t-value:	1.10
Critical t-value from the t-tables for a 1-tailed test:	
- At a 95% confidence level	1.645
- At a 99% confidence level	2.326

As the calculated t-value is not greater than or equal to the critical t-value (at the 95% confidence level), the null hypothesis cannot be rejected.

Further to the above, a t-test for all adolescents scoring above 9 was conducted as full remission of depression is a score of 9 or lower (Holm, Holm and Bech 2001: 264).

TABLE 4.6 GENDER T-TEST



Hypothesis 3

Adolescent girls will have more severe symptoms of depression than adolescent boys.

The t-test for the difference in means indicates that there is no significant difference in the intensity of depression between boys and girls. The t-value calculated by the software is 1.966. The spread of the data can be evaluated by testing whether the medians of the two distributions are equal. This non-parametric test does not show any significant difference in medians (highlighted in green below), indicating no significant difference between girls and boys with more than borderline depression. Therefore the study does not support hypothesis 3 that adolescent girls will have more severe symptoms of depression than adolescent boys.

Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
F	0	7	12	17	27	37	88
M	0	6	11	17	24	37	60

Median Test (Number of Points above Median)

Level	Count	Score Sum	Score Mean	(Mean-Mean0)/Std0
F	271	134	0.494465	0.215
M	114	55	0.482456	-0.215

1-way Test, chi-square Approximation

chi-square	DF	Prob>ChiSq
0.0462	1	0.8298

Hypothesis 4

Negative perceptions of family relationships and peer relations will be significant predictors of adolescent depression.

Many studies have been conducted which have suggested that family cohesion is related to several psychological outcomes, including depressive symptoms (Kashani; Beck; Hoeper; Fallahi; Corcoran; McAllister; Rosenberg; and Reid 1987:586 and McGee; Feehan; Williams; Partridge; and Silva 1990). Depressed adolescents have more negative perceptions of their families than other adolescents do. The more depressed the young person, the more negative are his perceptions of the way in which his family functions. Specifically, depressed adolescents describe their parents as distant, unsupportive, and emotionally unavailable (Ingersoll 1995:64-65)

Peer rejection is also linked to depressive symptoms, but it appears that when family relations are supportive, a secure foundation is laid which protects the adolescent from developing mental health problems to some extent. Research shows that when an adolescent feels misunderstood by his parents, he is more likely to seek out the advice, lifestyle and values of his peers (Ross 1999a:2). Peer relations appear to take on disproportionate importance when family cohesion and supportive family relations are absent.

Correlations

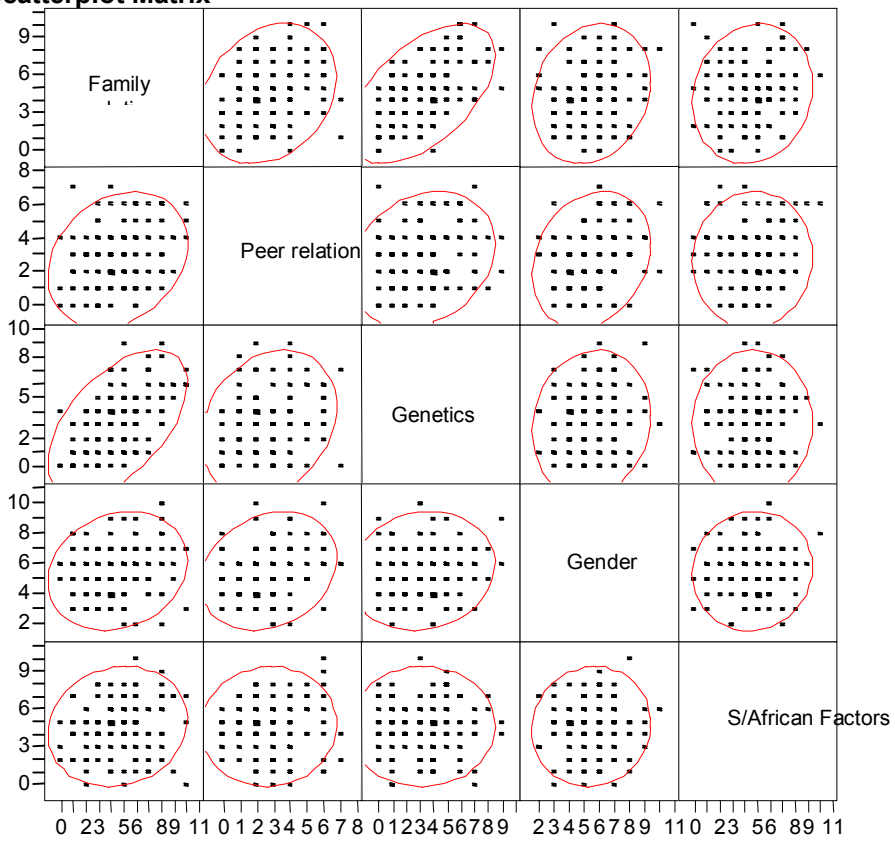
The possibility of collinearity between input variables was first checked. The elongation of an ellipse indicates the degree of correlation observed. Only in the case of family relations and genetics was a slight correlation observed, but not sufficient to suggest collinearity.

TABLE 4.7 MULTIVARIATE CORRELATIONS

Multivariate Correlations

	Family relations	Peer relations	Genetics	Gender	S/African Factors
Family relations	1.0000	0.2410	0.5432	0.1831	0.1160
Peer relations	0.2410	1.0000	0.2272	0.2229	0.0359
Genetics	0.5432	0.2272	1.0000	0.1118	0.0090
Gender	0.1831	0.2229	0.1118	1.0000	0.0553
S/African Factors	0.1160	0.0359	0.0090	0.0553	1.0000

Scatterplot Matrix



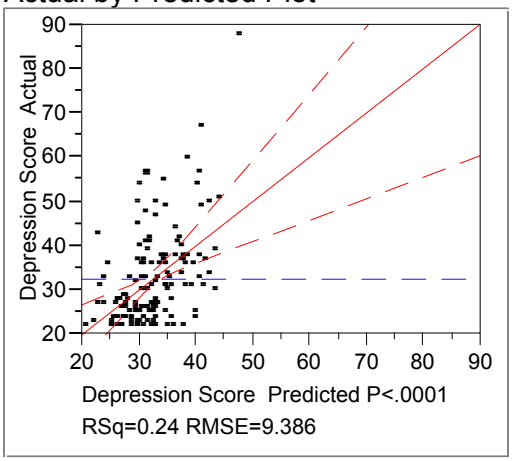
Main Model

After the test for collinearity between input variables, a linear regression model was fitted, with the inputs as independent variables and the depression score as the response. The summary of the fit of this model was R square .24 (24%), which was regarded as an acceptable fit for this type of information. There was therefore no lack of fit of the

model. From this model, it was clear that the only two factors that had a significant influence on the depression score were family relations and peer relations.

TABLE 4.8 RESPONSE DEPRESSION SCORE - WHOLE MODEL

Actual by Predicted Plot



Summary of Fit

Rsquare	0.239504
RSquare Adj	0.211545
Root Mean Square Error	9.385958
Mean of Response	32.59155
Observations (or Sum Wgts)	142

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	5	3773.225	754.645	8.5661
Error	136	11981.085	88.096	Prob > F
C. Total	141	15754.310		<.0001

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	135	11979.085	88.7340	44.3670
Pure Error	1	2.000	2.0000	Prob > F
Total Error	136	11981.085		0.1191
				Max RSq
				0.9999

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	39.441315	1.542063	25.58	<.0001
Family relations(0,10)	4.4776337	2.126767	2.11	0.0371
Peer relations(0,10)	12.006532	2.52194	4.76	<.0001
Genetics(0,10)	2.0478683	2.187419	0.94	0.3508
Gender(0,10)	-2.69675	2.537446	-1.06	0.2898
S/African Factors(0,10)	0.5054935	2.037662	0.25	0.8045

As both of the following factors are less than 0.05, they are considered statistically significant:

Family relations (0.0371)
Peer relations (0.0001)

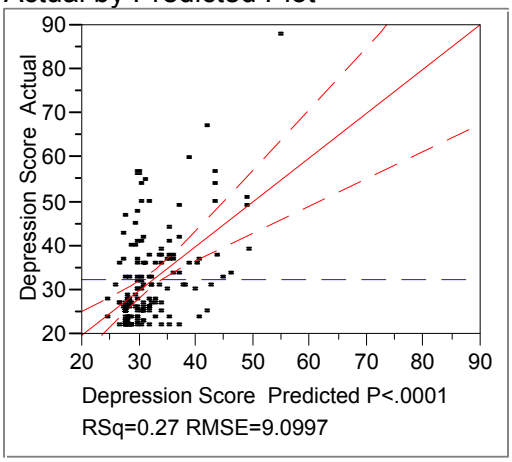
Simplified Model

A model was then fitted using only the two significant main effects (family and peer relations) and their interaction. It was found that the model does not have a significant lack of fit (p-value = 2.196 >0.05 for lack of fit test) and as such can be seen as an acceptable approximation of the data.

The simplified model produced a better fit of model – R-Square 27%. This means that approximately 27% of the variability in the data can be explained by these three factors (all 3 significant – p-values < 0.05). The remaining variability remains unexplained. The unexplained variability might be due to a missed variable (something other than the inputs tested) or because of the type of data that is notoriously variable as people are just not as predictable as chemical reactions!

TABLE 4.9 RESPONSE DEPRESSION SCORE - SIMPLIFIED MODEL

Actual by Predicted Plot



Summary of Fit

Rsquare	0.274673
RSquare Adj	0.258905
Root Mean Square Error	9.099701
Mean of Response	32.59155
Observations (or Sum Wgts)	142

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	4327.281	1442.43	17.4197
Error	138	11427.029	82.80	Prob > F
C. Total	141	15754.310		<.0001

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	54	4986.465	92.3419	1.2044
Pure Error	84	6440.564	76.6734	Prob > F
Total Error	138	11427.029		0.2196
				Max RSq
				0.5912

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	38.27712	1.294832	29.56	<.0001
Family relations(0,10)	11.217578	2.646272	4.24	<.0001
Peer relations(0,10)	12.923859	2.41537	5.35	<.0001
Family relations(0,10)*Peer relations(0,10)	14.633812	4.916257	2.98	0.0034

As stated above, the parameter estimates result in an even stronger correlation for the following factors:

Family relations (<0.001)

Peer relations (<0.001)

Finally, after fitting an adequate model, one typically looks at the residuals to see whether they show a random pattern around zero. In this case it does show a random enough pattern.

This study's research would appear to support the hypothesis that both negative perceptions of family relationships and peer relations are significant predictors of adolescent depression.

Hypothesis 5

A negative perception of South African life circumstances will have a significant positive correlation to symptoms of adolescent depression.

Items measured how adolescents perceived South African life circumstances, with focus on:

- The fear of contracting HIV/AIDS
- The impact HIV/AIDS has on their enjoyment of life
- The threat of crime and violence
- The impact of the threat of crime on their enjoyment on life
- Future job prospects in South Africa
- Their hopefulness about the future in South Africa

Worry about finding a job, the threat of crime and the lack of hopefulness about the future in South Africa were negative issues for most of the adolescents. The threat of contracting HIV and the impact HIV was having on their lives was of much greater concern to the adolescents in lower socio-economic schools.

The correlation matrix in Table 4.4 indicates that no significant correlation exists between South African factors and depressive symptoms in this sample of adolescents.

It seems likely that South African life circumstances play a role in explaining the high overall %age of adolescents who have major symptoms of depression. However, this study does not support the hypothesis that a negative perception of South African life circumstances has a **significant positive correlation** to symptoms of adolescent depression.

CHAPTER 5

EDUCATIONAL IMPLICATIONS OF THE RESEARCH AND SUGGESTIONS FOR FURTHER RESEARCH

5.1. Introduction

As stated in Chapter 1, South African adolescents today face extraordinary pressures and stresses. Adolescent HIV infection, abuse, crime, violence and poor employment prospects are increasing at rapid rates in our country and are some of the most commonly debated stresses. As these types of trauma impact on the lives of adolescents, their health, happiness and eventual ability to function productively as adults are at great risk. Young people can become unpredictable and experience difficulty in coping physically, mentally and emotionally.

Adolescents are particularly vulnerable to the effects of stress, as adolescence is in itself a complex developmental stage. During adolescence the young person must deal with changes to his body brought on by puberty, adjust to his budding sexuality and form a coherent identity, in order to face the world as an independent adult. These tasks are demanding even when the educational climate is ideal. When the educational climate is less than ideal, it must be near impossible for the adolescent to develop optimally.

The underdiagnosis of adolescent depression can lead to serious difficulties for the adolescent in school, work and personal adjustment. Depressive symptoms have been linked to adolescent suicide behaviour, substance abuse and major depressive episodes during adulthood (Robertson and Simons 1989:125).

When one takes into account South Africa's widespread socio-economic difficulties, it is difficult to understand why there is little research on the epidemiology of adolescent depression in South Africa and the identification of biopsychosocial factors which appear to be influencing the development of adolescent depression in South Africa.

It was therefore the purpose of this study to determine the prevalence of adolescent depression symptoms in the greater Johannesburg area and to determine which of the main factors identified in the literature study appeared to play a significant role in infuencing adolescent depression.

The major symptoms of adolescent depression were identified in Chapter 2 and the Goldberg Depression Scale measured the manifestation of these symptoms.

A literature study was done to identify the major factors, which could influence the development of adolescent depression in South Africa. The major factors, which could influence the development of adolescent depression, were identified as being familial relations, peer relations, gender factors, genetic predisposition and issues particularly pertinent to South Africa.

Factors such as socio-economic status, lifestyle habits and cultural norms appeared to have varying levels of influence on symptoms of adolescent depression.

An empirical investigation was carried out with the following goals:

i) To determine the prevalence of adolescent depression symptoms in the greater Johannesburg urban area.

ii) To gauge whether there is a significant difference between adolescent depression symptoms for boys and girls.

iii) To develop a measuring instrument (the ALPQ) with which to measure possible causative factors of adolescent depression.

iv) To determine which possible causative factors had a significant correlation with adolescent depression symptoms.

5.2. Summary of results

This section summarises the results from the literature study and the empirical investigation.

5.2.1. Summary of results from the literature study

A number of theories that explain the causes of adolescent depression were discussed in Chapter 2. Although it can be seen that no single theory explains all the causes of adolescent depression, ample evidence exists to prove the pertinence of each theory.

5.2.2. Summary of results from the empirical study

It is clear that this research supports previous research, in that it concurs with the view that family cohesion, family support and positive peer relations can protect the adolescent from developing symptoms of depression. Negative family relations and negative peer relations had a higher correlation to adolescent depression scores than any of the other identified factors. This implies that family and peer relations should be the main areas of focus for the educator.

" What is the prevalence of adolescent depression symptoms in the greater Johannesburg area?"

The results of the empirical investigation confirmed that 38% (just over one third) of the total number of adolescents had mild, moderate or severe indicators of depression symptoms. This is a high percentage and exceeds percentages of adolescent depression quoted in American research studies (as seen in Chapter 1).

"What appears to be influencing the development of adolescent depression symptoms in the greater Johannesburg area?"

The results of the empirical investigation indicated that the two factors that were rated most negatively by adolescents, who had significant depressive symptom scores, were

Family Relations and Peer Relations. The study reveals that significant depression scores could be correlated with their negative perceptions of issues surrounding adolescents' family and peer relationships. Whilst the other identified factors played a role in influencing the development of depression, their correlation to depression scores was not significant.

5.3. Educational implications

Exposure to negative family and peer relations as well as other factors place youth at a higher risk of becoming depressed. An educational programme should therefore address the following:

- Family relationships
- Parenting practices
- Peer relationships
- Decision-making skills
- Problem-solving skills
- Dealing with feelings in a healthy manner

5.3.1. The role of the educator

The implication of the importance of healthy family relationships in guarding against the development adolescent depression, is that it would be relevant for educators to educate and support the family as a whole during the period of adolescence. This education should focus attention on:

- Building mentally healthy families
- Promoting understanding in families of the causes and effects of stress and trauma on adolescents
- Raising awareness of the emotional needs of adolescents.

Parents should be encouraged to attend workshops on how best to support their adolescents and should be reminded of the value of the key ingredients regarding effective parenting, which create a climate in which the adolescent can thrive. Programmes, which inform parents and adolescents together and are aimed at fostering family cohesion and understanding of each other's needs, would also be of benefit.

An emphasis should be placed on encouraging adolescents to build positive and healthy peer relationships.

Underpinning the curriculum should be an emphasis on problem solving and decision making. Learned helplessness and a lack of belief in the ability to control one's environment were areas of difficulty for both male and female adolescents. This implies that educators need to make a definite shift away from traditional methods of teaching, which encouraged passive rote learning of facts, which were force-fed to adolescents by teachers. Constructing their own meaning of their learning in context, would allow adolescents to feel that they have more control over their environments and would help to counteract the learned helplessness which seemed very evident among the adolescents in this research sample.

5.3.2. An educational approach to South African issues:

Negative employment prospects; HIV/AIDS; Crime and Violence

Educational life-skills programmes, should overall aim at building resilience in adolescents to create positive mental health, but they should be tailor-made to meet the needs of the adolescents within a particular school. This would be more beneficial than standardised programmes for all adolescents.

As this research has shown, there are differences in the needs of adolescents in higher and lower socio-economic areas. Adolescents in some of the higher socio-economic schools worry about their future prospects within the country. These adolescents abuse alcohol and drugs as their coping strategy. Therefore, programmes within these schools should

emphasise the development of alternative healthy coping strategies to deal with adolescent stress – other than turning to drugs and alcohol. Acquiring the ability to handle feelings of anxiety, depression and rage removes the impetus to use alcohol and drugs as "self-medication". If these basic emotional skills were taught in schools as early as possible, addictive habits should not become established (Goleman 1996:255).

Adolescents from lower socio-economic schools seemed to worry about contracting HIV and the impact of HIV infection on their lives. These adolescents either live with the threat of HIV or already have HIV in their homes. Therefore, programmes within lower socio-economic areas should emphasise emotional intelligence in adolescents in dealing with the HIV/AIDS crisis. For adolescent males the emphasis should be on valuing and respecting people of both genders. For adolescent females, the emphasis should be on raising self-esteem and teaching girls assertive skills and personal decision making, so that they learn to empower themselves to be less submissive to males.

It is the role of the educator to assess the ever-changing needs of the adolescents in her or his care. The curriculum must meet the needs of adolescents and learning should be relevant to the context in which they live. Emphasis should be placed on helping adolescents to manage their own expectations and prepare for the job market trends, which await them when they leave school. Focus should be on the adolescent acquiring relevant skills within an area that holds interest for them. This implies that educators should not only focus attention on market trends but also train adolescents in self-awareness, so that they can find a niche for themselves within this market. Entrepreneurial projects should be encouraged at school.

5.4. Practical implementations of the ALPQ

The ALPQ could be used as an assessment tool to determine the needs of adolescents in any particular school. By identifying the specific factors that are negatively impacting on the adolescents' emotional well being, the educator would be able to develop parent programmes and adolescent life skills programmes, which address these needs. The

educator would also be able to motivate any relevant changes needed to the curriculum as a whole.

5.5. Guidelines for improving adolescent emotional well being

To improve adolescent emotional well being there first needs to be acknowledgement of the prevalence of adolescent depression. There is at times a tendency for parents and educators to view adolescence as a highly stressful, unstable period of the lifecycle and hence consider depressive symptoms to be a relatively common and normal aspect of adolescent development. However several recent studies have found that adolescent depression is not the transitory, benign condition it has been presumed to be. Depressive symptoms have been linked to adolescent suicide behaviour. In addition, strong evidence suggests that adolescent depression often is a precursor to substance abuse and major depressive episodes during adulthood (Robertson and Simons 1989:125).

Once there is an acknowledgement of the problem, motivation to improve the situation should follow. Education of educators, parents and the adolescents with regard to the symptoms of depression, should increase awareness and early diagnosis of depression. Early diagnosis and early intervention helps to prevent an escalation of depression and lessens the chances of concomitant problems like drug and alcohol abuse and other negative behaviours developing.

It is particularly important that male adolescents are not ignored. The manifestation of depression might be less overt in males than with females but this research has shown that there is no statistical difference between the severity and prevalence of female and male depression.

Measures should be taken which address the concerns of adolescents on a need basis. If an assessment of the adolescents' needs in a school, results in certain common negative themes emerging, these needs should be addressed in community and school based

programmes. These programmes would then be relevant and appropriate within the context of these adolescents' lives.

5.6. The role of the parents

Effective parenting of the adolescent is vital to their emotional well being. The family is, of all the social institutions in which the adolescent can find himself, that which is likely to have the most profound influence on his or her emotional well being. It is the role of the parent to create a cohesive and supportive family.

Covey (1997 20-21), McKeown, Garrison and Jackson (1997:279) and Ge (1996:717-731), all agree that a healthy family is neither necessarily average, nor merely lacking in negative characteristics, rather it has described positive features. The hallmarks of families that seem to flourish in an atmosphere of warmth and ease, even under stressful life events appear to be, in summary, that these families:

- Believe in the inherent "goodness" of one another and do not assume bad intent of other members.
- Set limits neutrally, without emotional rejection and judgement.
- Accept the inevitability of mistakes.
- Can show fear and uncertainty with expectation of reassurance and understanding
- Humour is present and there is joy and humour in family relationships.
- Have clear boundaries exist between family members i.e. the responsibilities of adults are clear and separate from the responsibilities of the children. Children are allowed to take responsibility and make decisions gradually.
- Give equal consideration to all family member's feelings and needs when decisions are made.
- Allow all the family members the freedom to express themselves autonomously, including different opinions or viewpoints.
- Are able to co-ordinate tasks, negotiate differences and reach closure effectively

- Accept different perspectives on reality and discuss philosophies and values regarding life together.

5.7. Evaluation of the research

The principal aim of this study was to provide answers to the problems identified in Chapter 1, namely, " What is the prevalence of adolescent depression symptoms in the greater Johannesburg area?" and "What appears to be influencing the development of adolescent depression symptoms in the greater Johannesburg area?" It is indicated below that these questions were in fact answered, and other significant aspects are noted. Finally, the problematic aspects of the study are discussed.

5.7.1. Significance of the study

The study makes the following contributions to the field of educational psychology and the study of adolescents:

- it summaries a number of theories on adolescent depression and identifies aspects of adolescent depression that should be addressed by educators, parents and counsellors;
- risk factors that could lead to adolescent depression are discussed and the aspects that according to these factors need to be addressed in school programmes and by parents are identified;
- the scale of adolescent depression within the South African context and the need for awareness of this within schools is identified;
- the need for effective, proactive addressing of adolescent depression within schools in the South African context is identified.

5.7.2. Limitations of the study

(i) The fact that within the overall sample, a small number of males from a very high socio-economic school was used in the empirical investigation, could have limited the validity of the results

(ii) Certain standard limitations are inherent in all self-report questionnaires (Huysamen 1984:98) :

- It is very difficult to assess the level of honesty with which the adolescents answered the ALPQ
- It is also difficult to assess whether all the adolescents interpreted all the items correctly
- It is difficult to allow for all the different cultural norms when developing the items for ALPQ
- It is impossible to ensure that all input variables are totally independent of one another when measuring human relationships.
- There may also have been individual adolescents with other problems, such as anxiety or illness on the day of testing, which may have influenced the results.

5.8. Recommendations for further research

- For practical reasons the investigation was conducted using only adolescents from the greater Johannesburg area: Randburg; Sunward Park (Boksburg); Soweto (Meadowlands) and Diepsloot. A repetition of the investigation could be done using

adolescents from a wider rural and urban area to establish whether the same influential factors play a role in the development of adolescent depression.

- The sample could be said to be representative of the population of secondary adolescents as it used a cross-section of cultures and socio-economic status, but a further investigation should include more males in the sample.

- The investigation concerning the link between possible causative factors and symptoms of adolescent depression was conducted using only Grade 11 adolescents. This research could be extended to include more subjects from earlier secondary school grades, in order to use the results to develop programmes more timeously.

5.9. Conclusion

The research objective underpinning this study was to develop an understanding of the factors which could be influencing the development of adolescent depression in the South African context.

This study provided the field of educational psychology with valuable research in the field of adolescent depression. An understanding was gained of the direction an educational programme that serves as a basis for intervention in the field of adolescent depression should have.

This study highlighted some of the problems in the field of adolescent depression and made recommendations for further research.

APPENDIX A

THE GOLDBERG DEPRESSION SCALE

QUESTIONNAIRES AS ADMINISTERED

GOLDBERG DEPRESSION SCALE

The 18 items below refer to how you have felt and behaved during the past week. For each item, show the extent to which it is true by ticking the correct box.

1. I do things slowly.

Not at all	Just a little	Sometimes	Often	A lot	Very much

2. My future seems hopeless

Not at all	Just a little	Sometimes	Often	A lot	Very much

3. It is hard for me to concentrate on reading

Not at all	Just a little	Sometimes	Often	A lot	Very much

4. The pleasure and joy has gone out of my life

Not at all	Just a little	Sometimes	Often	A lot	Very much

5. I have difficulty making decisions

Not at all	Just a little	Sometimes	Often	A lot	Very much

6. I have lost interest in things in life that used to be important to me.

Not at all	Just a little	Sometimes	Often	A lot	Very much

GOLDBERG DEPRESSION SCALE - continued

7. I feel sad, blue and unhappy

Not at all	Just a little	Sometimes	Often	A lot	Very much

8. I am upset and worried and keep moving around

Not at all	Just a little	Sometimes	Often	A lot	Very much

9. I feel tired

Not at all	Just a little	Sometimes	Often	A lot	Very much

10. It takes great effort for me to do simple things

Not at all	Just a little	Sometimes	Often	A lot	Very much

11. I feel that I am a guilty person who deserves to be punished

Not at all	Just a little	Sometimes	Often	A lot	Very much

12. I feel like a failure

Not at all	Just a little	Sometimes	Often	A lot	Very much

13. I feel lifeless..more dead than alive

Not at all	Just a little	Sometimes	Often	A lot	Very much

14. My sleep has been disturbed….too little, too much, or broken sleep

Not at all	Just a little	Sometimes	Often	A lot	Very much

GOLDBERG DEPRESSION SCALE - continued

15. I spend time thinking about how I might kill myself

Not at all	Just a little	Sometimes	Often	A lot	Very much

16. I feel trapped or caught

Not at all	Just a little	Sometimes	Often	A lot	Very much

17. I feel depressed even when good things happen to me

Not at all	Just a little	Sometimes	Often	A lot	Very much

18. Without trying, I have lost, or gained, weight.

Not at all	Just a little	Sometimes	Often	A lot	Very much

SCORING:

Not at all	Just a little	Sometimes	Often	A lot	Very much
0	**1**	**2**	**3**	**4**	**5**

0 to 9	10 to 17	18 to 21	22 to 35	36 to 53	54 -
No depression likely	Possible mild depressive symptoms	Borderline depressive symptoms	Mild to moderate depressive symptoms	Moderate to severe depressive symptoms	Severe depressive symptoms

APPENDIX B

THE ADOLESCENT LIFE PERSPECTIVE QUESTIONNAIRE (ALPQ)

Adolescent Life Perspective Questionnaire

Please fill in the details below

Male / Female: ……
Age: …….

Are you presently taking any medication ? ……..

Please list the medications ……

Question	**Yes**	**No**
1. Is your family supportive of you?		
2. Do you have friends your own age?		
3. Are you a happy person?		
4. Do you think you have to behave a certain way because you are A girl/boy?		
5. Do you think South Africa is a positive place to live?		
6. Would you describe your relationship with your mother as good?		
7. Do your friends influence you to do things you don't want to do?		
8. Do you feel ashamed or embarrassed about your body?		
9. Do your friends value your opinions and respect you?		
10. Does your mother cope well with day to day life?		
11. Does your father cope well with day to day life?		
12. Do you worry a lot about becoming a victim of crime?		
13. Do you feel you can solve problems by yourself?		
14. Does your family argue a lot?		
15. Do you often feel lonely?		
16. Does either of your parents seem sad, irritable or angry quite often?		
17. Do you have to take care of others in your family?		
18. Do you worry about getting infected with the HIV virus?		
19. Are you allowed to make important decisions in your family?		
20. Do you enjoy spending time with people your own age?		
21. Has your mother ever been depressed for more than two weeks?		
22. Has your father ever been depressed for more than two weeks?		

Adolescent Life Perspective Questionnaire - continued

Question	Yes	No
23. Do you think people want to hear your opinions?		
24. Do you feel hopeful about your future in South Africa?		
25. Do you and your friends drink alcohol often?		
26. Do you feel accepted by your parents?		
27. Do you cope well with day to day life?		
28. Do you worry that your friends might be HIV positive?		
29. Do you enjoy going home to your family?		
30. Do people your own age enjoy spending time with you?		
31. Is your mother a happy person?		
32. Is your father a happy person?		
33. Are your parents divorced?		
34. Has the threat of crime caused you to stop trusting people?		
35. Do you worry a lot about how you look?		
36. Has anyone in your close family died in the last two years?		
37. Are your opinions and beliefs respected in your family?		
38. Have you been personally affected by crime?		
39. Are you not allowed to do certain things because you are a boy/girl?		
40. Do you worry a lot about your relationships with others?		
41. Do you and your friends use illegal drugs?		
42. Do you worry about finding a job when you leave school?		
43. Do you feel it is your role to take care of others?		
44. Has the threat of getting HIV affected your enjoyment of life?		
45. Do you feel rejected by people your own age?		
46. Do you feel dependent on others to sort out your difficulties in life?		
47. Do you look forward to being an independent adult in South Africa?		
48. Do you feel understood by people your own age?		
49. Would you describe your relationship with your father as good?		
50. Do your parents' moods affect your moods?		

APPENDIX C
RAW DATA FROM ALL SCHOOLS IN THE SAMPLE

Raw data from all schools in the sample

1. Girls School (Soweto) – 31 of 99 Grade 11 girls

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
1	88	10	6	6	3	5
2	67	9	4	6	5	7
3	57	4	2	4	4	5
4	45	3	2	1	3	5
5	43	2	0	1	5	5
6	40	1	3	3	5	5
7	39	10	5	6	7	7
8	38	5	4	5	3	4
9	36	4	2	7	7	5
10	36	4	4	4	7	6
11	36	5	3	2	7	5
12	32	4	2	1	6	8
13	31	6	2	5	6	5
14	31	5	5	2	5	6
15	31	7	5	7	6	6
16	30	5	2	4	7	5
17	28	2	1	2	4	6
18	27	3	0	0	4	4
19	27	4	1	5	4	5
20	25	3	3	3	4	4
21	25	6	1	4	6	5
22	25	8	2	5	9	6
23	25	7	1	1	4	4
24	25	5	1	7	6	4
25	24	8	4	8	7	7

26	24	6	0	4	5	2

Raw data from all schools in the sample

1. Girls School (Soweto) – continued

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
27	23	6	1	4	5	5
28	22	3	0	2	3	5
29	22	4	1	2	6	6
30	22	5	1	4	4	5
31	22	5	2	5	5	6

2. Combined School (Diepsloot) – 16 of 33 grade 11's 19 girls and 14 boys

Adolescent No	Male / Female	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
1	F	54	5	2	1	6	7
2	M	50	4	3	1	3	6
3	F	49	8	6	3	10	6
4	M	49	6	4	1	7	2
5	F	42	6	4	5	7	8
6	M	38	3	5	3	5	4
7	F	36	3	0	4	6	4
8	F	33	5	2	1	5	7
9	F	33	0	1	4	6	2
10	M	33	6	1	1	6	5
11	F	31	4	0	1	8	5

12	F	31	3	4	4	5	7
13	F	28	6	0	3	7	6
14	F	26	3	3	0	5	4

Raw data from all schools in the sample

2. Combined School (Diepsloot) – continued

15	F	26	1	2	2	4	4
16	M	24	2	3	0	7	6

3. Private Boys' College (Randburg) – 14 of 31 grade 11 boys

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
1	51	8	6	5	6	9
2	42	6	2	4	6	3
3	38	8	3	4	2	7
4	37	3	6	2	7	4
5	36	6	5	3	5	7
6	36	7	4	2	4	6
7	34	6	4	4	9	4
8	33	2	3	4	5	2
9	33	4	3	7	3	5
10	30	4	7	7	6	4
11	23	3	3	4	4	2
12	22	5	4	3	5	5
13	22	4	3	2	4	6
14	22	1	2	1	5	5

Raw data from all schools in the sample

4. Private Girls' College (Randburg) – 28 of 73 grade 11 girls

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
1	55	7	2	7	5	1
2	54	6	6	4	8	1
3	50	5	2	1	5	0
4	47	7	1	8	5	6
5	44	5	4	9	9	5
6	39	4	4	0	9	3
7	38	10	4	7	7	0
8	38	4	4	4	7	6
9	37	0	4	0	6	5
10	37	2	3	4	6	4
11	33	8	5	6	8	4
12	33	3	4	1	5	5
13	32	2	4	4	6	3
14	30	4	2	5	4	4
15	29	2	1	3	3	5
16	28	1	2	3	6	2
17	27	2	2	1	4	1
18	27	3	0	2	7	3
19	27	6	3	3	7	5
20	27	1	2	1	7	7
21	27	5	3	2	6	4
22	26	2	3	1	3	0

23	26	3	1	4	6	5
24	25	9	4	6	6	1
25	25	4	4	3	5	1
26	25	2	3	1	8	5

Raw data from all schools in the sample

4. Private Girls' College (Randburg) – continued

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
27	24	5	3	1	5	6
28	24	1	3	0	8	5

5. Government High School - Boys (Boksburg)– 18 of 69 Grade 11 Boys

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
1	60	7	4	5	5	3
2	38	4	3	6	5	5
3	37	5	4	4	2	3
4	37	8	3	3	8	2
5	37	5	6	6	6	7
6	34	7	6	6	7	2
7	29	3	2	0	6	4
8	28	4	2	1	7	2
9	28	5	3	0	4	5
10	26	8	1	6	4	3
11	26	3	2	5	3	8
12	26	5	1	3	4	4

13	25	6	2	2	5	5
14	24	1	2	0	7	7
15	23	1	1	0	3	7
16	22	1	4	1	8	4
17	22	6	1	1	6	7
18	22	0	0	0	5	3

Raw data from all schools in the sample

6. Government High School - Girls (Boksburg) – 35 of 80 Grade 11 Girls

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
1	57	6	6	3	8	10
2	50	6	6	5	6	8
3	48	2	3	3	4	2
4	41	5	4	3	3	1
5	41	5	2	5	6	8
6	41	4	2	5	5	5
7	40	1	7	0	6	2
8	36	7	2	7	7	4
9	36	3	3	3	7	3
10	34	8	3	4	4	8
11	31	3	5	0	5	8
12	31	4	6	4	6	1
13	31	9	2	5	7	7
14	30	7	3	4	6	1
15	30	4	2	4	5	7
16	28	3	1	2	5	4
17	28	8	2	9	6	4
18	27	6	2	5	6	4
19	27	3	4	3	7	5
20	26	8	2	3	10	6
21	26	4	3	1	4	6

22	25	5	2	1	6	6
23	24	4	2	3	4	5
24	24	3	1	1	5	4
25	24	5	1	2	6	4
26	24	5	4	4	6	3
27	23	6	2	3	6	5
28	23	6	1	1	5	5
29	23	4	2	2	5	4

Raw data from all schools in the sample

6. Government High School - Girls (Boksburg) – continued

Adolescent number	Depression Score	Family relations	Peer relations	Genetics	Gender	S/African Factors
30	23	1	0	0	4	4
31	22	1	1	1	3	4
32	22	3	1	3	6	4
33	22	6	4	5	5	6
34	22	4	2	4	5	5
35	22	6	3	1	2	3

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