

**THE PREVALENCE OF DEPRESSION
IN PRIMARY SCHOOL CHILDREN
AND THE FACTORS THAT
CONTRIBUTE TO DEPRESSION**

By

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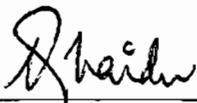
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DECLARATION

I, Rekha Naidu, hereby declare that the dissertation entitled :

“ The Prevalence of depression in primary school children and the factors that contribute to depression.” is the result of my own investigation and research and that it has not been submitted in part or in full for any other degree or to any other university.



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DEDICATION

This dissertation is dedicated to Bhagwan Shri Satya Sai Baba, whose divine love gave me strength, wisdom and courage.

Om Sai Ram

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ABSTRACT

The study investigated the concept of childhood depression principally in primary school preadolescent children. While there is a plethora of literature on adult depression, and a wealth of research studies on adolescent depression, there seems to be a dearth of research studies on preadolescent childhood depression. The researcher has also observed as an educator that with an increase of the incidence of child abuse , there was a concurrent increase of children with depressive symptoms in the classroom . The findings of this study will hopefully add to the available literature on childhood depression and assist in some way towards ameliorating the status quo in childhood depression.

The purpose of the study was to determine the prevalence of depression among pre-adolescent primary school children and to investigate the factors from home and school that may contribute to depression. Respondents completed the Children's Depression Inventory (CDI) and a specially developed Questionnaire. The findings from both the CDI and the Questionnaire were compared with relevant research studies.

The results of the study indicated that 10.3 % of the respondents were depressed. These results were similar to the findings of other studies with similar populations. The findings partially supported the inference that major depression begins in adolescence. The factors at home that were problematic were the relationship with parents and relationship with siblings. Generally the respondents were satisfied with matters at school

with the exception of their relationship with their teachers. Although most of the respondents seemed to enjoy good peer relationships and seemed to enjoy being at school, there were some negative aspects in the pupil –teacher relationship which are explored in more detail in the study.

Some recommendations were made to the school personnel as well as to parents. One very important implication that surfaced from the study is that schools should employ counsellors or psychologists who are well trained in children's problems to help and heal distressed children. It is hoped that this study raises the awareness of childhood depression and reflects the importance of early intervention and prevention programmes.

CHAPTER ONE

CONTEXT AND PURPOSE OF THIS STUDY

1.1 INTRODUCTION

The researcher's interest in childhood depression started in the 1990's when still an educator. Assorted pupils with assorted reasons presented with short term depressive symptoms. With limited expertise and a lot of care and concern the researcher would spend hours listening to the tales of the distressed child. Many themes emerged during these teacher-pupil heart-to-heart discussions. Interpersonal relationships at home and school ; sibling rivalry ; all types of abuse at the hands of parents, older brothers and sisters ,and teachers ; and negative self-perception of social and academic competencies both at home and at school generally were at the core of the unhappiness experienced by these children. It was then that the researcher realized that the world of the modern day child was far from her relatively carefree childhood days.

It was the interaction with these preadolescent boys and girls which augmented the researcher's keen interest and by then increasing need to understand fully what these children were experiencing. Many of the children gave the researcher an accurate picture of their feelings, moods and anxieties. Their words, " I can't help it, these feelings just come into me." ; " Every time I think about it , I know that nobody really loves me". ; " My father hits us with a belt if we make a mistake." made the researcher realize that there was much more to depressive symptoms than meets the eye. And so the idea of a research study was conceived. The researcher hopes that the findings of this study will add to the already burgeoning literature on the subject of childhood depression.

Interest in childhood depression goes back to the 1950s. The history of its entry into the mainstream of psychopathological nosology began with the rejection on theoretical grounds of the notion of incompatibility of the concept of childhood depression with psychoanalytic views on the origin of depressive illness. Others were not satisfied with the completeness of the clinical picture, its diagnostic precision, or the pharmacologic specificity of antidepressant medication in children (Schultebrandt, & Raskin, 1977) in Cytryn Gershon & McKnew (1977.)

Many clinical studies (Cytryn & McKnew, 1980) in Kazdin (1990), overcame these objections and paved the way to today's full acceptance of childhood affective illness as a valid psychopathological entity. In fact, as is often the case with newly accepted disease concepts, we may even be witnessing an over-diagnosing of childhood depression.

Interest on childhood depression has increased rapidly in the past two decades. It has been found that depressive symptoms exist in childhood and that they are stable over time (Harrington, 1993; Nolen-Hoeksema, Girgus & Seligman, 1992) in Chen, Rubin, Li (1995). Moreover, it has been found that depressed children may exhibit other socio-emotional problems such as negative self-perceptions of cognitive and social competence, low self-esteem, and loneliness (Ollendick & Yule, 1990; Strauss, Forehand, Smith, & Frame, 1986) in Chen, Rubin, Li (1995). Finally, childhood depression has been found to be associated with behavioural problems such as conduct disorders and social withdrawal (Bell-Dolan, Reaven, & Peterson, 1993; Rubin, 1993) in Chen, Rubin, Li (1995).

Thus, it is safe to conclude that depression constitutes a significant psychological phenomenon in childhood. Given this background, it is not surprising that many researchers

have investigated biological and psychosocial factors that may be associated with depression in childhood.

According to the psychosocial model (Kazdin, 1989) in Chen, Rubin Li (1995) , adverse life experiences - through the mediation of cognitive appraisal, emotional reactions and coping - may contribute to the emergence and development of depressed affect. For example, difficulties in academic achievement and social relationships with peers are provocative sources of stress and may result in, and facilitate depressed feelings. Indeed, in Western cultures, it has been consistently found that academic failure is associated with depressed affect (Fauber, Forehand, Long, Burke, & Faust, 1987; Kellam, Brown, Rubin, & Ensminger, 1983) in Chen, Rubin, Li (1995). It has also been demonstrated that children who have difficulties in peer relationships are likely to be depressed (e.g., Cole & Carpentieri, 1990; Jacobson, Lahey, & Strauss, 1983) in Chen, Rubin, Li (1995).

In addition to the school, the family has been considered the traditional agent of socialization (Maccoby & Martin, 1983) in Chen, Rubin Li (1995). Among family variables, parenting practices, especially parental acceptance and responsiveness, have been consistently identified as important factors that play critical roles in the development of adaptive and maladaptive functioning. For example, it has been reported that parents of depressed children are less warm and nurturant and more hostile than parents of children who are not depressed (Goodyer, Germany, Gowrusankur, & Altham, 1991; Puig-Antich et al., 1985) in Chen, Rubin, Li (1995).

1.2 RATIONALE

Traditionally, the study of childhood depression followed the patterns of investigations of adult affective illness. This approach has obvious advantages, offering us genetic, epidemiological, diagnostic, etiological, and therapeutic models, which were refined over many decades. These models are increasingly applied to the various aspects of childhood depression.

A number of epidemiological studies have reported that up to 2.5. % of children and up to 8.3 % of adolescents in the U.S. suffer from depression (Birmaher, Ryan, Williamson et al , 1996). In addition, research indicates that the onset of depression is occurring earlier in life than in past decades (Klerman, Weissman, 1989). 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, Wolk, Goldstein et al., 1999). Depression in young people often co-occurs with other mental disorders, most commonly anxiety, disruptive behaviour, or substance abuse disorders (Angold, Costello, 1993), and with physical illnesses, such as diabetes (Kovacs, 1997).

Almost all of these studies quoted above have been in the USA or Britain. There have been a scattering of similar studies in other parts of the world. In South Africa , however, to the best of the researcher's knowledge, the number of studies in childhood depression have not corresponded with the rest of the world.

One South African study Wessels, (1990) examined issues relating to the definition and identification of childhood depression. It also explored the role of the teacher in the early

identification of depression in children. Although this added to the literature on childhood depression, it is the researcher's opinion that the study did not tackle salient etiological and contributory factors in the study of childhood depression. More studies in this regard are necessary if we are to really embark upon preventative programmes as "Prevention is better than cure".

This existing "landscape" of depressive disorders in childhood is somewhat bleak and calls out for a two-pronged approach to this psychiatric disorder. First, there is a need for more aggressive efforts at early identification of and intervention with youngsters who have developed the disorder. Although under-treatment of depression is not specific to children and adolescents and has been documented in adults as well (Robins & Regier, 1991) in Kovacs (1997), ignoring depression at younger ages is likely to have more deleterious consequences.

1. At follow-up studies

To change this state of affairs will require long term public health service initiatives. Such initiatives should include community-based education to improve recognition of very early-onset of depression, the provision of reasonable access to care, possibly through school-based programmes (e.g., Kolvin et al., 1981) in Kovacs (1997), and removal of the stigma associated with psychiatric disorder and its treatment.

Second, much of what we know about depression in childhood strongly indicates the importance of primary prevention of the disorder in those who are at risk for it. A sufficient number of risk factors have already been identified to make it possible to consider approaches to primary prevention. For example, confirmed risk factors include the presence of sub-clinical depressive syndromes and prior non-affective psychiatric symptomatology, as well as

depressive illness in the family. Novel formulations about the mechanisms that convert risk (potential) into disorder (actuality), which could be examined in primary prevention research, may lead to better ways of helping children at risk for depression.

All these factors lead to the necessity to study what the prevalence of childhood depression is and then isolate factors which are contributors to children at-risk for developing depressive symptoms. Hence the focus of this research is finding out how serious the problem is and then examining factors at home and at school that could be contributors to childhood depression. More research along the same lines as the present study, as well as longitudinal studies will go a long way in ameliorating the state of affairs in childhood depression.

1.3 THE RESEARCH FOCUS

The researcher has always worked with preadolescent children and had their interests as the focus of her educational and informal sessions with them. She always looked for the reason behind the behaviour of disobedient, delinquent or withdrawn children

Depression in children and adolescents is associated with an increased risk in suicidal behaviours (Weissman, Wolk, Goldstein. et al, 1999) in National Institute of Mental Health (2000). This risk may rise, particularly among adolescent boys, if the depression is accompanied by conduct disorder and alcohol or other substance abuse (Shaffer, Craft, 1999) in National Institute of Mental Health (2000). In 1997, depression was the third leading cause of death in 10 - to 24 - year olds (Hoyert, Kochanek, Murphy, 1999) in National Institute of Mental Health (2000).

Deficits in social and academic competence have been implicated both as causes and as consequences of depression in children. According to a competency-based model of child depression, children internalize feedback from others about their performance in the academic and social (and other) domains. That is, children learn to perceive themselves in ways that reflect the manner in which others regard them . If children receive aversive feedback from multiple sources across multiple domains, they become cognitively cornered into adopting relatively global, negative views of themselves. Such negative self-perceptions place the child at risk for low self-esteem and possibly depression.

1.4 PURPOSE OF STUDY

The purpose of the study was therefore to :

1. determine the prevalence of depression among preadolescent primary school children.
2. investigate the factors from home that may contribute to depression.
3. investigate the factors from school that may contribute to depression.

1.5 CRITICAL QUESTIONS

This study focused generally on the prevalence of depression and specifically on the factors from home and school that could be contributing to depression. The following critical questions helped to frame the research study :

1. How prevalent is depression in preadolescent primary school children?
2. What are the factors at home that could contribute to depression ?
3. What are the factors at school that could contribute to depression ?

1.6 RESEARCH METHODOLOGY

A survey method was employed to collect data from the respondents. The Children's Depression Inventory (CDI) was administered first. A specially designed Questionnaire was developed to highlight some of the factors that may contribute to depression in preadolescent children. Both these instruments were administered to Grade 6 pupils in Resmount Primary School which is an inner western suburb situated in the Durban South region of Kwa-Zulu Natal. The study followed a case-study format. The results of a case study limit the generalizations of the findings but allows for certain amount of depth in the research. Chapter four will discuss the research methodology in greater detail.

Findings

The findings of the study reflect that the prevalence of depression in the sample match the findings of other similar studies. A relatively significant number of children could be classified as depressed according to the CDI. The findings of the Questionnaire reflect that the respondents generally were satisfied with school matters but found that relationships with parents, relationships with siblings and certain living conditions at home caused them unhappiness, misery and led to feelings of despondency. The results of the CDI and the findings of the Questionnaire will be presented in detail in chapter 5.

1.7 STRUCTURE OF THIS RESEARCH STUDY

In **chapter one**, the research question and the focus of this study are explained. The purpose of the study together with the critical questions are highlighted. The research methodology is outlined.

In **chapter two**, relevant literature pertaining to the three critical questions will be reviewed.

Chapter three will present all the various theories that were and are still employed to explain depression in children. Also the theoretical framework that framed this research will be discussed.

In **chapter four**, a detailed research methodology plan together with descriptions of the two instruments used will be outlined.

Analysis of the data gathered will be reported on in **chapter five**.

The discussion of the results will form the basis of **chapter six**.

Chapter seven will discuss limitations and strengths of the study, and some recommendations will be offered , and finally conclusions will be drawn.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter two reviews many of the relevant studies of childhood depression that are related to the present study. However, in order to place this study in a wider context, the researcher felt it was necessary to include some other research studies which, although not directly linked to the present study, are inextricably connected to the topic per se as well as to the overall concept of childhood depression. The discussion of the research studies may establish certain trends and links in relation to the critical questions:

1. How prevalent is depression in preadolescent primary school children ?
2. What are the factors at home that may contribute to depression ?
3. What are the factors at school that may contribute to depression ?

2.1.1 DEFINITION OF TERMS

The following is a list of terms and their explanations which will contribute to a better understanding of the topic.

Adolescence

Refers to the age between puberty and adulthood (the teenage years - ages 13 to 19).

Anhedonia

Reduced interest and / or pleasure in everyday activities; an inability to experience pleasure or joy.

Anxiety

Complex of reactions to a danger that is unclear and / diffuse. Generalized feelings of fear and apprehension.

Comorbidity

The term comorbidity most commonly refers to the presence of any additional disorder in a patient with a particular disorder.

Depressive Disorder / Depression

Mood disorder characterized by episodes of excessive and inappropriate sadness as well extreme dejection, gloomy ruminations, feelings of worthlessness, and loss of hope.

Developmental Psychopathology

Concerns itself with psychological problems in their developmental context. It regards the biological and social aspects of problems as bidirectionally influencing one another.

Dysthymic Disorder

According to the DSM IV, it is a moderately severe affective disorder characterized by extended periods of nonpsychotic depression and brief periods of normal moods.

Epidemiology

Is the study of the distribution and determinants of health-related conditions and events in populations.

Peer

Individuals who are of a similar age and share similar interests.

Preadolescent

A child who one or two years away from adolescence.

Prevalence

Current cases of people in a population who have a disorder at a particular time.

Sibling

Two or more children who have one or both parents in common.

Symptom

A biological, psychological, or behavioural manifestation of a disorder or illness.

Syndrome

A group of concurrent symptoms of a disease

For decades researchers and practitioners have puzzled over depression in children. Can children be depressed? If the answer is yes, are their symptoms identical to those of adults and thus diagnosable by the same criteria? Is childhood depression part of a more complex mental disorder yet unidentified? Do children have prodromal depressions that are harbingers of adult mood disorders? What are the risk and protective factors associated with childhood mood disorders? (Frazer, 1997).

2.2 Definitional Parameters

2.2.1 Introduction

Over the past several decades, remarkable scientific progress has occurred in our understanding of the mental disorders of childhood, adolescence, and adulthood (Institute of Medicine [IOM], 1985, 1989) in Cicchetti & Toth (1998). Despite these advances, mental illness continues to challenge millions of individuals and families as well as to place major stress on the service delivery system and on the research community that strive to better comprehend psychopathology and thereby contribute to improved treatment and prevention efforts (IOM, 1985, 1994) in Cicchetti & Toth (1998).

2.2.2 Prevalence of depression in children

Collapsing data from eight epidemiological surveys of children that were completed between 1987 and 1993, Hammen and Rudolph (1996) found overall rates for Major Depressive Disorder (MDD) to be between six percent and eight percent. Rates of depression increase with age. For preschool children, rates are low; they range from 0.9 percent in a clinic sample (Kashani & Carlson, 1987) in Kashani & Schmid (1992) to 0.3 percent in community samples (Kaplan et al , 1994). Between two percent and three percent of 6 - to 11- year- old youths are reported to have MDD. And between five percent and eight percent of adolescents are reported to have MDD (Cohen et al., 1993) in Kashani & Schmid (1992). Birth – cohort studies provide some evidence that prevalence rates of depression are increasing (Hammen & Rudolph, 1996) in Gilbert (1997).

2.2.2.1. Gender Differences

The prevalence of depression appears to vary by gender; however, gender-related patterns are far from clear. Findings of gender-related differences in prevalence rates are controversial

(Frazer 1997). In their recent review of studies of prevalence for adolescents, Hammen and Rudolph (1996) in Gilbert (1997) reported that adolescent girls are more frequently depressed than boys. The lifetime risk for MDD is known to vary from ten percent to 25 percent for women and from five percent to nine percent for men (Kaplan et al., 1994)

2.2.2.2. Relationship of Suicide to Depression

Suicide and suicide attempts are not only diagnostic criteria and outcomes of depressive disorders but also risk factors for future episodes of depression. Overall prevalence rates for suicide increase with age. (Kaplan et al ., 1994) in Gilbert (1997).

2.2.3. Children versus adults

Most often the criteria associated with adult depression have been applied to children, and developmental considerations that may affect the etiology, course and outcome of depression in children and adolescents have been minimized or disregarded entirely. Although the mood disorders of children and adolescents have been investigated for a shorter period of time than the mood disorders of adults, in recent decades there has been a proliferation of research activity in the area of childhood and adolescent depression. Efforts have been made to recognize that symptoms of these disorders may be manifested differently in children and adolescents than in adults (APA, 1994; Birmaher, Ryan, Williamson, Brent, Kaufman, Dahl, et al., 1996; Kovacs, 1996).

In contrast to earlier beliefs that called into question whether or not depressive illness could occur before puberty (Rie, 1966) in Harrington (1993), contemporary emphases have shifted from a focus on debating which criteria should be used to diagnose childhood mood disorders to more sophisticated examinations of the epidemiology, causes, course, sequelae,

and treatment responses of depressed and / or dysthymic children as well as of children who are considered to be at risk for depression because they have one or more relatives with a mood disorder (Birmaher, Ryan, Williamson, Brent, Kaufman, Dahl, et al., 1996; Cicchetti & Schneider- Rosen, 1986; Downey & Coyne, 1990; Kovacs, 1996; Puig-Antich, 1986; Todd, Newman, Geller, Fox, & Kickock, 1993; Weissman et al., 1987).

2.2.4 Depression as a symptom or as a syndrome

One of the problems in the clarification of the concept of depression is the distinction between depression as a symptom and depression as a syndrome. Depressed affect and depressive symptoms are experienced by many people at some time during their lives, and can be regarded as part of the normal range of human emotional reaction. By contrast, the term syndrome implies more than just an isolated symptom, but the combination with other symptoms to form a symptom complex. In most classification systems, the syndrome of depression is defined by the combination of depressed mood with certain associated symptoms.

The third revised version of the American Diagnostic and Statistical Manual's (DSM 111-R) (American Psychiatric Association, 1987) definition of major depression syndrome for example, requires the presence of at least five out of nine symptoms (Feighner et al., 1972; Spitzer, Endicott& Robins, 1978) in Harrington (1993). Accordingly, most diagnostic systems include additional criteria that are intended to sharpen the differentiation between depressive symptoms and the syndrome of depression.

2.2.5 Diagnostic criteria/ categories

Depressive disorders are reflected by categorical diagnoses, such as those proffered in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV; American Psychiatric Association [APA] , 1994 or in the International Classification of Diseases (ICD- 10; World Health Organisation, 1996). Stated simply, depressive disorders, also referred to as mood disorders, involve disturbances of emotion that affect an individual's entire psychic life (IOM), 1994). Depressive disorders are characterized by a pervasive mood disturbance that involves feelings of sadness and loss of interest or pleasure in most activities in conjunction with disturbances in sleep, appetite, concentration, libido, and energy.

Current formal diagnostic systems- the 10th revision of the International Classification of Diseases ({ICD-10}; World Health Organization, 1992), and the third, revised third, and fourth editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, DSM-III-R, and DSM-IV, respectively; American Psychiatric Association, 1980, 1987, 1994) - use clinical criteria (i.e., symptoms and behavioural signs) to classify subtypes of depressive experience and functional impairment. The DSM acknowledge that depression, like many mental disorders, has no currently obvious natural classes. If natural classes of depression exist, then their nosology awaits the discovery of distinct and reliable genetic, biological, clinical, or other predictors of risk, severity, or clinical course. Clinicians have a tradition of separating depressions into subtypes ; however, this sub - typing has not yet led to clear - cut delineations of syndromes in populations (Hammen & Rudolph, 1996) in Gilbert (1997).

The specific diagnostic criteria of the DSM-IV and the ICD-10 are the most widely used in the field of childhood depression today. According to the DSM -IV, depression is identified

as one of four categories of mood disorders. Subgroups of depression are major depressive disorder (MDD), which is acute, and dysthymic disorder (DD), which is milder but chronic. Although many researchers and practitioners continue to question the application of adult criteria to depression in children, the same diagnostic criteria are used for both populations (APA, 1994; Hammen & Rudolph, 1996; Rutter, 1986 Ryan et al., 1987).

The two main psychiatric classification systems, DSM (American Psychiatric Association, 1987, 1991) and the International Classification of Diseases (World Health Organization, 1992: ICD-10) differ in their approach to these multiple overlapping diagnoses. For the most part DSM allows for the generation of multiple diagnoses, with the consequence that with mixed clinical pictures it is common for subjects to have several different diagnoses. The ICD-10, by contrast, assumes that in most cases one diagnosis will take precedence (Harrington, 1993).

2.2.5.1 Specific criteria for children

The criteria for MDD are either (1) a depressed or, for children, irritable mood, or (2) a diminished interest or pleasure in activities. Children must also demonstrate four or more of the following symptoms:

- significant weight increase or loss or failure to make expected developmental gains
- almost daily sleep disturbance
- almost daily psychomotor agitation or retardation
- almost daily loss of energy or fatigue
- feelings of worthlessness or inappropriate guilt
- diminished ability to think or concentrate
- recurrent thoughts of death

Symptoms must coexist for two weeks and produce significant functional changes (APA, 1994; Kaplan et al., 1994) in Cicchetti & Toth (1998). Sadness, appetite loss, sleep disturbance, and fatigue are the most common symptoms in children under six years old (Kashani & Carlson, 1987) in Gilbert (1997). Prepubertal children often exhibit sad affect, exaggerated somatic complaints, psychomotor agitation, separation anxiety, fears, hallucinations, irritability, uncooperativeness, and disinterest (Kashani, Holcomb, & Orvaschel, 1986; Ryan et al., 1987). Adolescents experience a loss of interest in activities, feelings of hopelessness, hypersomnia, weight changes, use and abuse of illicit substances, and suicidal ideation and attempts (Ryan et al., 1987).

Criteria for DD in children require a depressed or irritable mood most of the day, for most days, and for longer than one year. Children must also have three of the following symptoms: sleep disturbances, low energy or fatigue, loss of interest in activities, hopelessness or pessimism, social withdrawal, feelings of guilt, low self-esteem, appetite changes, and poor mentation (concentration, memory, and problem solving). In clinical populations DD can last a long time, with a reported median duration of 3.5 years (APA, 1994; Kaplan, Sadock, & Grebb, 1994; Kovacs et al., 1984) in Gilbert (1997).

The use of these criteria probably excludes some cases of childhood depression by failing to incorporate the age-related influences of cognitive, emotional, behavioural, and social development on symptom expression (Cicchetti& Schneider-Rosen, 1986; Hammen & Rudolph, 1996; Kazdin, 1988) in Gilbert (1997).

2.2.6 Consequences of depression

The consequences of depression during childhood and adolescence cannot be minimized. Depressive disorders are neither normal developmental occurrences nor short-lived problems that dissipate with time. Even when episodes remit, they commonly recur and interfere with children's ability to function competently (Kovacs, Feinberg, Crouse-Novak, Paulauskas, & Finkelstein, 1984; Kovacs, Feinberg, Crouse-Novak, Paulauskas, Pollock & Finkelstein, 1984) in McWhirter & McWhirter (1997).

In a recent review of the literature, Birmaher and colleagues (Birmaher, Ryan, Williamson Brent, Kaufman, Dahl, et al., 1996) in Cicchetti & Toth (1998), concluded that the average length of an episode of MDD in children and adolescents was seven to nine months. With respect to comorbidity, 40% to 70% of depressed children and adolescents develop an additional or comorbid disorder, with 20% to 50% estimated to have two or more comorbid diagnoses. The most frequent comorbid diagnoses include DD, anxiety disorder, disruptive disorder, and substance abuse (Harrington et al., 1996; Kovacs,1989, 1996). MDD typically precedes the onset of alcohol or substance abuse by approximately four and a half years, thereby providing an important window period for the prevention of substance abuse in depressed adolescents (Birmaher, Ryan, Williamson, Brent, Kaufman, Dahl, et al., 1996) in Cicchetti & Toth (1998).

2.2.7 Conclusion

Conflicting classificatory criteria continue to complicate the study of childhood depression and render research findings incommensurable. Still emerging, a valid and reliable classification system is a prerequisite for studies of prevalence, development of assessment instruments and measurement of intervention outcomes (Frazer 1997).

2.3 Etiology of Depression

2.3.1 Introduction

The etiology of depression is an elusive one, and research and clinical observation of children have been vital in this search. Several theories have been proposed, looking at psychodynamic, cognitive-behavioural, family/ genetic, and biological models as the basis for the etiology of depression.

2.3.2 Theories of depression

2.3.2.1 Psychoanalytic / Psychodynamic models

Many models of the etiology of depression have arisen from the psychodynamic perspective. Two of importance are included in this discussion. In the first model, that of Abraham (1960) and Freud (1917/1957) in Kazdin (1990), depression is seen as anger turned inward. Although this is a widely held viewpoint, it does not seem adequate when researched in children. Studies of boys and girls using self-report measures find that children with high scores of depressive symptoms can outscore their peers in measures of outward - directed hostility (Akiskal & McKinney, 1975) in Lonigan, Carey, Finch (1994). In other words, they express their anger outwardly rather than inwardly.

The second psychodynamic model proposed in the etiology of depression is that of object loss, or separation. Object loss is theorized to be the "final stress" that precipitates depression in a vulnerable individual (Kraemer, 1986; Beardslee, Schultz & Selman, 1987). The key role of attachment and the pathological effects of separation in infancy and childhood were elaborated by Bowlby .Bowlby (1973) in Gilbert (1997) conceived the infant's attachment

to the mother from an ethological point of view, stressing innate behaviour sequences on the part of both mother and child that initiate and strengthen an emotional bond that forms independently of any postulated oral gratification.

Although it has been shown that these psychodynamic theories may prolong or exacerbate a depression in a vulnerable individual, research is not yet conclusive as to their unique ability to cause a depression.

2.3.2.2 Cognitive models

Cognitive models are based on clinical findings of abnormal ways of thinking that characterize depressed persons. Cognitive formulations emphasize the importance of covert behaviours, such as attitudes, self-statements, images, memories and beliefs.

In Beck's (1976) in Benfield (1988) cognitive model of depression, negative thoughts of self, one's experiences and the future (the "cognitive triad") cause and prolong depression, rather than simply being symptoms of depression. According to Beck, the existence of the cognitive triad is apparent through the misinterpretations and misperceptions by depressed persons of their environment. While Beck's theories have been studied extensively in adults, the literature on children and adolescents is limited (Speier, Sherak, Hirsch & Cantwell, 1995).

Another cognitive model proposed in the etiology of depression is learned helplessness (Seligman & Peterson, 1986). McCracken (1992) in (Speier, Sherak, Hirsch & Cantwell, 1995) describes learned helplessness as the behavioural state characterized by minimal attempts to adapt or respond to aversive stimuli, resulting from exposure to inescapable,

overwhelming, or uncontrollable stressors. While the negative attributional style of the cognitive-behavioural model is consistent with depressive symptoms for both child and adult its specificity and predictive value remain to be evaluated (McCracken, 1992) in (Speier, Sherak, Hirsch & Cantwell, 1995).

2.3.2.3 Behavioural models

Behavioural theories of depression are concerned primarily with the analysis of overt behaviour. Rather than postulating underlying mental causes for behaviour, these theories focus on understanding behaviour in terms of environmental events that either precede or follow the behaviour.

Skinner (1953) in Lewinsohn & Gotlib (1995) postulated that depression was the result of a weakening of behaviour due to the interruption of established sequences of behaviour that had been positively reinforced by the social environment. Ferster (1973) in Lewinsohn & Gotlib (1995) believed that depression was a reduction in the frequency of emission of certain kinds of adaptive responses or activities which could be positively reinforced. Ferster also suggested that the depressed individual was on an extinction schedule, receiving a reduced rate of reinforcement.

In Lewinsohn's (1974) in Lewinsohn & Gotlib (1995) behavioural theory of depression, a vicious cycle occurs when the child has a "loss of reinforcement " (Lazarus, 1968; Lewinsohn, 1974) in Lewinsohn & Gotlib (1995), and thus fails to use his/ her adaptive resources adaptively. This results in a maintenance of the depressed state, because the child fails to elicit more positive feedback from others. This is also consistent with the idea of reduced social competence.

In sum, behavioural models of depression implicate a reduction in the rate or the effectiveness of positive reinforcement received by individuals from others in their environment in the etiology and/ or maintenance of this disorder.

2.3.2.4 Biological Theories

Biological theories of depression attribute the symptoms and affect of depression to chemical or molecular physical irregularities. The nature of the particular irregularities postulated to be responsible for depression varies with different biological theories.

2.3.2.4.1 Genetic factors

Psychopathology in a family can significantly contribute to depression. Parental depression, especially maternal depression, appears to be a nonspecific risk factor in the development of psychopathology in children (Mitchell, McCauley, Burke, Calderon, & Schloredt, 1989). Familial loading of affective disorders in the children of parents having psychopathology, has been studied by many investigators (Beardslee, Bemporad, Keller, & Klerman, 1983; Hammen et al ., 1987; Weissman, et al ., 1984;) in Messer & Gross (1995). These studies indicate a familial loading for psychopathology, specifically mood disorders, but researchers are not able to specify whether this is the result of biological - genetic factors or of family-environmental interactions.

Mcguffin, Katz and Rutherford (1991) in Kaelber, Moul & Farmer (1995) found that both genetic factors and shared family environment made substantial and significant contributions

to the familiarity of depression, with an estimated heritability of liability to major depression of about 50 %. Many of the major twin studies have been methodologically flawed because of : 1. unrepresentative samples ; 2. use of indirect diagnostic information; 3. nonblind or potentially inaccurate zygosity evaluation.

The broader question arises as to whether the family's social or environmental interactions cause depression in these children, or whether genetic inheritance of depression causes these environmental problems. Genetic studies of depression show that the risk for affective disorder among first-degree relatives of bipolar and unipolar probands is increased. Moreover, although genetic vulnerability is extremely important, its course appears to be influenced by environmental factors. The diathesis - stress model posits that although the origins of depression may be attributable to genetics, the course of the disorder is affected by the interplay among biological and environmental factors such as stress and social support Hammen & Rudolph, 1996 in Gilbert (1997). But, a major gap in our understanding of genetic modes of transmission lies in the paucity of research in children and adolescents (Speier, Sherak, Hirsch, & Cantwell, 1995).

2.3.2.4.2 Neurobiological systems

Another possible biological theory proposed in the etiology of depression is the study of neurotransmitters and neuro-endocrine systems, which are highly interdependent. Research in this area has greatly contributed to the present understanding of the neurobiological characteristics of depression. Also important in this field is the " chicken or egg " controversy over findings, for it is not clear whether depression causes changes in a child's neurobiology or whether changes in a child's neurobiology cause depression.

Biological correlates are important in increasing our understanding of the basic pathophysiology of the depressive disorder.

2.3.2.5 A Developmental Psychopathology Perspective on Depression

Developmental psychopathology, a diagnostic mode of analysis that first gained acceptance during the 1970's, represents a complex attempt to coordinate a variety of disciplines-including general developmental psychology, genetics, clinical psychiatry, behavioural psychology, and the medical model - under one rubric. Commentaries on developmental psychopathology have referred to the approach as a synthesis or a mosaic embracing the vast amount of data generated during the past few decades (Cicchetti, 1984) in Cicchetti & Sneider-Rosen (1986).

Thus the first notable feature of the developmental framework is that it is receptive to research gathered from a broad spectrum of diverse sources. In a word, the developmental model permits eclectic analysis: phenomena derived from one particular discipline may be effectively integrated into the developmental model along with data extrapolated from an ostensibly unrelated discipline.

The developmental approach embodies this flexibility as a research tool primarily because it posits that fruitful psychiatric analysis can be achieved only when individual capacities and experiences are conceived of as occurring along a chronological continuum, a temporal axis, which spans birth through adulthood. This is not to suggest that behaviours will be continuous, undeviating, or stable over time. Rather the totality of genetic factors with which the child is endowed, as well as the myriad of environmental factors that sculpt experience,

need to be viewed as elements contributing to the composite portrait of individual personality.

Moreover, the developmental perspective permits us to analyse how various genetic factors intertwine with environmental factors at any given point in development, motivating the individual to devise effective coping strategies or in contrast, creating frustrating "snags" in development that may provoke subsequent psychopathology.

A developmental psychopathology conceptualization of the depressive disorders of childhood and adolescence espouses the viewpoint that to comprehend human development, it is essential to understand the integration of developmental processes at multiple levels of biological, psychological, and social complexity within individuals over the lifespan. Thus, multidisciplinary efforts to unify and integrate the advances that have taken place in the fields of developmental psychology, clinical psychology, psychiatry, epidemiology, sociology, neurobiology, genetics, and the neurosciences within the developmental psychopathology perspective are essential to address the critical issues involved in the development of depressive disorders (Cicchetti & Toth, 1998).

Depressive disorders are conceived as heterogenous conditions that are likely to eventuate through a variety of developmental pathways. Single risk factors can rarely be conceived as resulting in depressive outcomes. Rather, the organization of biological, psychological, and social systems as they have been structured over development must be fully examined. A depressotypic developmental organization is considered a potential precursor to depressive illness (Cicchetti & Toth , 1998).

The developmental position challenges researchers to move beyond identifying isolated aberrations in cognitive, affective, interpersonal, and biological components of depressive presentations, to understand how those components have evolved developmentally, and to understand how they are integrated within and across biological and psychological systems of the individual embedded within a multilevel social ecology (Cicchetti & Toth, 1998).

Developmental psychologists assert that children from diverse familial and cultural environments, with varying biological endowments, manifest depressive symptoms in age-appropriate ways (Cicchetti & Schneider-Rosen, 1986). This approach highlights the interplay among advances and lags in cognitive, social, emotional and neurobiological systems for the developing child. The developmental psychopathology model describes the link among attachments with caretakers, negative cognitive schemata, difficulties with the modulation of negative affect, and the development of depressive symptoms (Cicchetti, & Rosen-Schneider, 1986).

Such a model is deemed useful in conceptualizing the interaction between the depressed youth and the environment and the individual competencies and environmental resources associated with resiliency in overcoming depression. It is recognized that cognitive and behavioural processes associated with depression are embedded in the broader framework of developmental psychopathology (Lewis & Miller, 1990) in Kaslow, Brown, Mee (1994).

Child psychiatry differs most obviously from adult psychiatry in terms of the fact that it deals with a developing organism. Yet surprisingly and regrettably, research into the process of development and research into clinical psychiatric disorders have remained rather separate endeavours (Achenbach, 1978) in Rutter, Izard, Read (1986).

By taking a developmental perspective, an attempt is made to bring the two together. Such a perspective comprises three main components :

1. As the adjective " developmental " implies, it is concerned with the processes and mechanisms of development through childhood and into adult life, with an interest in discontinuities as well as continuities, and especially with a focus on the possibility that experiences or processes in one phase of development may modify an individual's set of responses at a later point - through either " sensitizing" or "steeling" effects.
2. As the noun " psychopathology " indicates, the interest does not lie in normality or abnormality as such but rather in the links or lack of links between normal emotions or behaviour and clinical disorders or illnesses; similarly, there is a focus on the parallels or lack of parallels between the "normal" processes of adaptation and change and " abnormal" responses to stress or adversity.
3. The conjunction of noun and adjective emphasises a concern to understand the age - dependent susceptibility to stress or age - differentiated forms of disorder and the effects of psychopathology on the course of development.

2.3.3 Conclusion

The etiology of depression is most likely multi-factorial, with some subsets of depression weighted toward a psychodynamic – cognitive – environmental etiology and others based more on genetic – biological factors. This is strongly suggested by the different " paths " seen clinically in depressive symptomatology to depression as a diagnosable condition. Some children, under environmental stress move slowly from dysthymia (neurotic depression) to a

full blown depressive disorder. Other children without noticeable stressors, rapidly move from a well functioning state into an acute depressive episode.

What factors place these children at greater risk than other children from similar families or environmental backgrounds are still relatively unclear. Continued research in all these areas is needed in order to further elucidate the causes contributing to depression and better understand their interrelationship.

2.4 Comorbidities

2.4.1 Introduction

The term comorbidity most commonly refers to the presence of any additional disorder in a patient with a particular disorder. In some cases, however, researchers have used the term to refer to the extent to which symptoms or symptom clusters co-occur (Brown & Barlow, 1992; Moras & Barlow, 1992) in Kaslow, Brown, Mee (1994). This approach is useful because the presence of sub - clinical disorders or symptom clusters not meeting an additional diagnosis can also have etiological and predictive value.

Discussions and studies of comorbidity must consider the question: Which is the primary diagnosis ? In some cases, the distinction between primary and secondary diagnoses is made temporally on the basis of which disorder appeared first. In other cases, clinical severity is the distinguishing factor. And still in other cases, the causal relationship between two disorders is examined, and the primary disorder is held to be the one that causes the other disorder (Klerman , 1990) in Kendall& Brady (1995).

2.4.2 The correlation between anxiety and depression

Given the overlap between anxiety and depression, several positions have emerged. The unitary view has argued for conceptualizing anxiety and depression as representing a single continuum on the basis of overlapping symptomatology, clinical instability, and treatment specificity (e.g. Dobson, 1985; Stavrakaki & Vargo, 1986) in Lonigan, Carey & Finch (1994). The pluralistic view (anxiety and depression are best conceptualized as separate disorders) has also been advocated (e.g., Gurney, Roth, Garside, Kerr, & Schapira, 1972 ; Roth, Gurney, Garside, & Kerr, 1972) in Lonigan, Carey & Finch(1994). Watson and colleagues (Clark & Watson, 1991; Watson & Clark, 1984; Watson & Tellegen, 1985) in Lonigan, Carey & Finch(1994) have provided a framework that approaches an integration of these two positions.

The relation between anxiety and depressive disorders in adults has received considerable attention in the past two decades (e.g. Akiskal & McKinney, 1975 ; Kendall and Watson, 1989) in Lonigan, Carey & Finch(1994). A number of investigators have begun to examine the association between anxiety and depression in children and adolescents (e.g. Brady and Kendall, 1992) in Lonigan, Carey & Finch(1994).

Strauss, Last, Hersen, and Kazdin (1988) in Lonigan, Carey & Finch(1994) examined the overlap of anxiety and depressive disorders in 106 children referred for evaluation to an outpatient child and adolescent anxiety disorders clinic. Strauss et al., found that 30 of the children with a DSM-111 anxiety disorder also met criteria for a DSM-111 depressive disorder. Other investigations have found similar results (e.g., Kashani et al., 1987, 1990 ; Kovacs, Gatsonis, Paulauskas, & Richards, 1989) in Gilbert (1997). These studies indicate

that, in a manner similar to adults, anxiety and depression are related in children and adolescents.

Although there are undoubtedly virtues in considering both anxiety and depression as existing on a spectrum of distress, current nosologies have attempted to distinguish these commonly associated kinds of syndromes - partly to sharpen conceptualization (Klerman, Endicott, Spitzer, & Hirschfeld, 1979) in Kaelber, Moul, Farmer (1995), and partly for empirical reasons (Jorm, 1987) in Kaelber, Moul, Farmer (1995).

However there have been relatively few studies involving the comorbidity of anxiety and depression in children. Of those that have been conducted, many have had very limited sample sizes (e.g., Bernstein & Garfinkel, 1986; Hershberg, Carlson, Cantwell, & Strober, 1982) in Lonigan, Carey & Finch(1994) or have used unstandardized measures of anxiety and depression (e.g., Hershberg et al., 1982) in Lonigan, Carey & Finch(1994). Such problems limit the generalizability of the findings.

2.4.3 Psychiatric disorders

Comorbid psychiatric disorders are very common in children and adolescents with depression; conduct disorders, anxiety, phobias, and somatic complaints are frequently seen. In a study by Puig-Antich and Rabinovich (1986), 59% of a sample of 80 depressed prepubertal children had significant separation anxiety, and 48% had moderate to severe phobia. A high rate of co-occurrence of disorders was found in a large community survey in New Zealand where 11 year old children were systematically assessed. Of those with a

diagnosable condition, 55% occurred as combinations of two or more disorders (Anderson et al, 1987), one being a psychiatric disorder.

Clinical (e.g., Ryan et al., 1987) as well as epidemiological investigations (Anderson and McGhee, 1994) have shown that 40% to 70% of depressed children and adolescents have comorbid psychiatric disorders, and at least 20% to 50% have two or more comorbid diagnoses.

2.4.4 Alcohol and Substance Abuse

The comorbidity of alcohol or substance abuse has been documented in two studies (Kashani et al., 1987; Deykin, Levy & Wells, 1987) in Cicchetti & Toth (1998). Both studies demonstrated that 25% of those subjects meeting criteria for depression also met criteria for substance abuse. It is difficult to determine what this high rate of comorbidity signifies. As Angold and Costello (1993) in National Institute of Mental Health (2000) have shown, such high rates of comorbidity for depression with anxiety, and depression with conduct disorder, could not occur by chance alone. What this strong association between these disorders means, however, is unclear. Are these so called internalizing disorders (depression, anxiety, etc.) pathogenetically related, representing different etiologies and outcomes from patients with externalizing (e.g., conduct) disorders?

2.4.5 Conduct Disorder

Conduct disorder and related problems, including aggressive behaviour, are associated with deficits in social functioning. For example, aggressive children are typically rejected by peers and have poor social problem-solving skills (Dodge et al., 1986, 1990) in Renouf (1997).

In clinical samples, from 36 % to 80 % of depressed juveniles meet criteria for conduct disorder (Ferro et al ., 1994; Kovacs et al, 1988) in Renouf (1997).

2.4.6 Impaired Social Functioning

There is considerable evidence that depression in childhood is associated with impaired social functioning. Children with depressive symptoms or depressed affect usually are less socially skilled or accepted than non depressed peers (Kennedy et al., 1989) in Renouf (1997) and typically have low self-esteem (Renouf and Harter, 1990) in Renouf (1997).However , comparatively little is known about the impact of comorbid depressive and externalizing disorder on social functioning.

The goal of a study by Renouf, A.G., Kovacs, M., Mukerji, P.(1997), was to examine the relationship of depressive, conduct, and comorbid disorders and two domains of social functioning, namely, social competence and self-esteem. The researchers hypothesized that children with comorbid depressive and conduct disorders have worse social functioning than those with either disorder or some other disorder. The results showed partial support for the hypothesis. When the results of the two analytic approaches were integrated, there were indications that depressive and conduct disorders and their co-occurrence have variable effects on different domains of social competence and that the deleterious consequences of conduct disorder are more persistent than those of depression. The findings also suggest that social impairment associated with comorbid depression and conduct disorder is mostly due to conduct disorder.

There is good reason to believe that socially incompetent children might be depressed. Social competence, measured by peer ratings or peer nominations, has positive associations with

popularity (Asher et al., 1984) in Blechman, McEnroe, Carella, Audette (1986) and classroom and play behaviour (Dodge,1983; Foster & Ritchley, 1985) in Blechman, McEnroe, Carella, Audette (1986) and negative associations with referral for psychiatric treatment (Achenbach & Edelbrock, 1981) in Blechman, McEnroe, Carella, Audette (1986) and psychiatric diagnosis in adulthood (Lewine, Watt,& Fryer, 1978) in Blechman, McEnroe, Carella, Audette (1986) .

2.4.7 Conclusion

One of the recurring findings in childhood and adolescent psychopathology in general is the high rate of co-occurrence of disorders. With respect to depressive disorders, comorbidity is the rule rather than the exception. Comorbid diagnoses appear to influence the risk for recurrent depression, duration of the depressive episode, suicide attempts or behaviours, functional outcome, response to treatment.

2.5 Masked Depression

2.5.1 Introduction

During the 1960s the predominant view in the psychoanalytic literature was that depressive conditions resembling adult depression could not occur in children because the personality structure of the child was too immature (Rie, 1966) in Harrington (1993). Rochlin (1959) in Harrington (1993), for example, considered that depression was impossible in middle childhood because the child does not have a sufficiently formulated superego to direct aggression against his own ego. However, middle childhood has also been seen as a time when depression does occur, but in a " masked" form. In this formulation children between roughly the ages of six and ten years of age are in a transition period. They are able to

experience adult-like depressive conditions but they express these feelings in a different way. Glaser (1967) in Harrington (1993), for instance, hypothesized that masked depression included symptoms such as phobias, delinquency, and somatic symptoms.

2.5.2 Unmasking “ masked “ depression

Cytryn and McKnew (1972) proposed that the most common type of depression in childhood was masked depression, which could be diagnosed on the basis of features such as facial expression, and fantasy content. However, these authors also described a "typical" depressive syndrome occurring in children. This consisted of symptoms such as hopelessness, psychomotor retardation, sleep problems, appetite disturbance, social withdrawal and other symptoms seen in adult depressive disorders.

2.5.3 Diagnosis of masked depression

However, the idea that depression in young children is mostly expressed through non depressive symptoms, with few obvious signs of a primary mood state, has proved very difficult to put into practice. The problem is that no one has been able to devise a set of criteria that can reliably distinguish between symptoms that are due to depression and identical symptoms that occur as part of a different underlying disorder. Furthermore, the symptoms that were thought to be due to masked depression included all the possible psychiatric symptoms of childhood depression (Gittelman-Klein, 1977 ;Puig-Antich & Gittelman, 1982).

Since the current classification systems are mostly specified in descriptive rather than etiological terms, it is somewhat confusing to classify an individual as depressed when he or she shows few overt signs of depression. Finally, as Kovacs and Beck (1977) in Kovacs

(1997) pointed out, the term " masked depression " is not only misleading but also probably unnecessary. They noted that many of the behaviours listed as masking depression in children were often a prominent part of the clinical picture in adults. Moreover, Carlson and Cantwell (1980) in Stark (1990) found that other psychiatric symptoms did not usually mask depressive symptoms. Careful clinical examination would usually reveal the underlying depression. Similar observations have been made in more recent studies (Kolvin et al, 1991) in Kovacs (1997).

2.5.4 Conclusion

As Kovacs and Beck noted in 1977, there are two basic viewpoints on the manifestation of childhood depression. One view holds that except for some development - specific modifications, childhood depressions resemble adult depressions. The alternative view essentially states that most children do not express depression directly and that it must be inferred from behaviours and symptoms " masking" the underlying depressive feelings.

2.6 CDI - Uses and Criticisms

2.6.1 Introduction

The Children's Depression Inventory (CDI: Kovacs, 1981) in Finch & Saylor (1985) is the most commonly cited and thoroughly researched self-report measure of childhood depression (Kazdin, 1981; Saylor , Finch , Spirito , and Bennett, 1984) in Finch & Saylor (1985). Efforts to further examine the psychometric properties of the CDI and to utilize it clinically have been hampered by the absence of published normative data. In an unpublished manuscript, Kovacs (1983) in Finch & Saylor (1985) reported a mean of 9.28 (SD = 7.30 for a sample of 860 8 - 14 year old Toronto, Canada, school children. She further cited

Green (1980) as finding a nearly identical mean of 9.72 (SD = 7)for 630 12 to 15 year old Pennsylvania school children.

2.6.2 Factors of CDI and Depression

In a study by Hodges, K and Craighead, W.E. (1970) seventy patients (45 boys and 25 girls) hospitalized in the children's psychiatric unit at the Duke University Medical Centre composed the sample. The age range was 6 to 13. This study examined the relationship between diagnosed depression (both as a categorical and a continuous variable) and the factor scores of the CDI. The data indicated that three factors - Dysphoric Mood, Loss of Personal and Social Interest, and Self-Deprecation- were clearly related to clinical depression. These relationships were significant for both the categorical and continuous data analyses.

These CDI data were consistent with the failure to find biological markers of depression among adolescents, especially those of younger ages (Puig-Antich, 1986) in Hodges & Craighead (1990). This suggests the possibility of developmental differences in the nature of depression, a finding that needs further study, especially in longitudinal designs.

2.6.3 Age and Sex differences

Although the definition of depressive symptoms is currently the same for people of all ages and both sexes, the need to attend to possible age and sex differences in evaluating this kind of assessment tool has been frequently referred to in critiques of research (e.g., Kazdin &

Petti, 1982) in Finch, Saylor, Edwards (1985).Furthermore, multi - method investigations of the CDI and other children's assessment instruments have demonstrated that there may be some clinical utility to examining sex and age groups separately (Kazdin, French, & Unis, 1983; Saylor, Finch, Baskin, Furey, & Kelly, 1984) in Finch, Saylor, Edwards (1985).

Finch,A.J.(jr), Saylor, C.F.,& Edwards, G.L.,conducted a study in 1985 entitled : Children's Depression Inventory : Sex and Grade Norms for Normal Children. The subjects were 1463 public school children in Florida ranging in age from 7 to 16 years. There were 705 boys and 758 girls. Results indicated that there were significant grade effects as well as significant sex effects. However the magnitude of these differences was very small. These data suggest that although the normative scores may differ for the two sexes, with girls reporting fewer depressive symptoms than boys, the size and clinical significance of these differences are small. The grade effects are even smaller and more difficult to interpret, but it appears that very young children tend to report fewer symptoms than older groups. Again the size and clinical significance of these differences are small.

In prepubertal children it seems that depressive disorder is just as common in boys as in girls (Kashani et al, 1983; Fleming, Offord & Boyle, 1989; Costello, 1989; Velez, Johnson & Cohen, 1989) in Gilbert (1997), and some studies have reported that there is a male preponderance (J. Anderson et al, 1987). There is also good evidence that by adulthood women have higher rates of depression than men (Weissman & Klerman, 1977) in Messer & Gross (1995). So, at some point between the two age periods there must be a shift in the sex ratio for depressive disorder.

From the data provided by Fleming et al (1989) it would seem that there may be an increase in rates of depression in both boys and girls, but the increase is particularly marked in girls. Hammen and Rudolph (1996) in Gilbert (1997) reported that adolescent girls are more frequently depressed than boys. Kovacs (1983) in Finch, Saylor, Edwards (1985) found no significant relationship between either age or sex and the total CDI.

2.6.4 Usefulness of CDI

A number of studies have provided information on the use of the CDI in differentiating between depressed and non depressed youngsters (e.g., Kazdin et al., 1983; Nelson et al., 1987; Wendel, Nelson, Politano, Mayhall, & Finch, 1988) in Fristad, Emery, Beck (1997). The results of these studies are mixed but tend to show a lack of diagnostic efficacy. Although not designed as a diagnostic measure, the CDI is useful in assessing the severity of depressive symptomatology (Fine et al ., 1985). The CDI has been shown to have good test-retest reliability and high internal consistency (Costello and Angold, 1988) in Fristad, Emery, Beck (1997)..

2.6.5 Criticisms of the CDI

Use of the Children's Depression Inventory (CDI; Kovacs, 1983) to screen for depression and to quantify depressive symptomatology appears supported by the empirical literature (Hodges, 1990). The diagnostic utility of the CDI, nevertheless, may be limited (Asarnow & Carlson, 1985; Hodges, 1990). Although the CDI had high specificity (i.e., 91 % and 84 %), it had low sensitivity (i.e., 54 % for both studies). This is not surprising because the CDI was developed before the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM- III; American Psychiatric Association, 1980), and it does not obtain all relevant information for a diagnosis (e.g., onset and duration).

The CDI has also been criticized because of its item selection. Some items asking about externalizing behavioural problems (e.g., disobedience, aggressiveness) were included in the CDI. Criteria for depression in the DSM-111 and its revised version, DSM-111-R (American Psychiatric Association, 1987), however do not include externalizing behavioural problems. One solution to this discrepancy would be to determine whether use of subscales, which separate externalizing and depression items, would be preferable to using the CDI total score.

2.6.6 Conclusion

Concerns have been expressed about the CDI's ability to select children with depression from community samples (Costello and Angold, 1988). Nevertheless , it has been used in a variety of studies, including several treatment studies (Stark, 1990; Fine et al., 1991) and remains one of the most widely used of the self-report measures for children.

2.7 Childhood depression and Home Factors

2.7.1 Introduction

Though research into the causes and correlates of childhood depression is in its early stages, available evidence suggests that social interaction within the family is a promising line of investigation. Such evidence is available from several sources.

First, depressed adults retrospectively describe their home environments as uncaring and overly intrusive (e.g., Crook, Raskin, & Eliot, 1981; Gerlsma, Emmelkamp, & Arrindell, 1990; Parker, 1983) in Messer & Gross (1995). In related research, observational studies of depressed adults' family interactions (Hops et al., 1987 ; Libet & Lewinsohn, 1973) in Messer & Gross (1995) demonstrate more aversive exchanges among family members.

Second, although based on a paucity of studies, depressed children's family relationships have been noted for poor communication, detachment, or rejection (e.g., Burbach & Borduin, 1986; Poznanski & Zrull, 1970; Puig-Antich et al., 1985, 1993; Stark, Humphrey, Crook, & Lewis, 1990) in Messer& Gross (1995).

Lastly, research with children of depressed parents at risk for depressive disorders (Beardslee, Bemporad, Keller, & Klerman, 1983; Downey & Coyne, 1990) in Messer& Gross (1995) suggests that depressed mothers' childrearing interactions are less stimulating, less affectionate, and more hostile than controls (e.g., Hammen, 1991; Orvaschel, Weissman, & Kidd, 1980; Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985; Weissman, Paykel, & Klerman, 1972) in Messer& Gross (1995).

2.7.2 Family Dysfunction

Several community-based studies have shown that depressive disorder is associated with some aspect of family dysfunction (Bird et al, 1989; Kashani, Burbach & Rosenberg, 1988; Velez, Johnson & Cohen, 1989). For instance, one of the few factors that predicted major depression in the study of Velez et al (1989) in Manassis & Hood (1997) was the presence of emotional problems in parents. Similar findings have been reported in studies of depressive symptoms. For instance, Kandel and Davies (1986) found that family dysfunction was one of the factors that predicted continuity of depressive symptoms to early adulthood, though this effect disappeared when the effects of intervening events were controlled .

2.7.3 Low social class/ Family income

In general, interview- based studies have reported that low social class was not significantly associated with depressive disorder in young people (Costello, 1989; Bird et al , 1989). For instance, in a longitudinal analysis of risk factors that predicted the subsequent development of psychiatric disorders in middle childhood and adolescence, Velez, Johnson and Cohen (1989) found that major depression was the only disorder not predicted by low social class. However, several self-report surveys of depressive symptoms have found an association of these symptoms with income or class. Kaplan et al (1984) found that lower social class adolescents were more depressed than higher social class adolescents. Kandel and Davies (1982) found that low family income was associated with depressive symptoms.

The purpose of a study by Messer, S.C., & Gross, A.M., (1995) , was to examine the relation among family environmental factors and childhood depression from a social- interaction perspective. Results revealed that both children and parents in families with a depressed child perceived their lives to be more stressful than did controls. This finding is consistent with other studies of adults and children that reported an association between depression and life events (e.g., Brown& Harris, 1978; Johnson , 1988; Messer, Williamson, & Birmaher, 1993).

Research has focused on depression in children of parents with affective disorders (Downey, & Coyne, 1990;Gottlib, 1982; Kowalik & Gottlib, 1987; Kahn, Coyne & Margolin, 1985) in Nilzon & Palmerus (1997). Much less work has examined other family factors, such as discord and dysfunctional family dynamics. Exposure to inter-parental conflict is a common source of stress for children and has been shown to be predictive of problems in emotional adjustment (Holmes& Rahe, 1967; Kanner, Coyne, Schefer, & Lazarus, 1981) in Nilzon &

Palmerus (1997). Other family antecedents of depression in children, according to the theory of learned helplessness (Seligman, 1975) in Nilzon & Palmerus (1997), include a hard work load and restrictive parental methods of conflict resolution.

2.7.4 Limitations

The majority of studies, however, have been limited by an almost exclusive reliance on self-report measures, the lack of longitudinal data, and the often implicit assumption that disturbed parenting " causes " childhood depression. These issues are especially salient considering the potential biases in self- or other reports (e.g., Brewin, Andrews, & Gotlib, 1985; Gerlsma et al., 1990; Lewinsohn & Rosenbaum, 1987).

In addition, contemporary developmental models assume the bidirectional nature of parent-child influence. According to the empirical work of Coyne and others (1992), depressed subjects are likely to elicit negative reactions from others, withdraw from rejecting environments, acquire dependent and reassurance seeking behavioural styles, and thus contribute in part to the development of their own symptoms. Similar evidence is beginning to emerge in the childhood depression literature (e.g., Larson, Raffaelli, Richards, Ham & Jewell, 1990 ; Peterson, Mullins, & Ridley-Johnson, 1985; Puig-Antich et al., 1985) highlighting the importance of taking bidirectional influences into consideration. Observational data of family interaction can provide a relatively independent, and possibly less biased, index of family relationships.

2.7.5 Conclusion

To further explicate etiological models of childhood depression and begin to unravel temporal-causal relationships, research in developmental psychopathology suggests two

important methodological considerations for future research. First, longitudinal studies, using both microsocial and macrosocial measures of family relationships, stress, and their interactions would be highly informative. Second, within family studies of high-risk and /depressed children and their unaffected siblings may shed light on crucial mechanisms mediating the onset and course of childhood depression, and the role played by family interaction and adversity in its development.

2.8 School Factors and Depression

2.8.1 Introduction

Because children's difficulties are likely to surface within the complex social and achievement milieu of the school, school personnel are in a position to spot indicative symptoms before, or even more reliably than parents (Peterson, Wonderlich, Reaven, & Mullins, 1987; Stout, 1987) in Hart (1991). This is especially true when the parents' contribution to familial distress causes them to deny the existence of their child's depressive behaviours.

2.8.2 Teachers' evaluations of troubled children

According to a national survey of school psychologists (Harris, Gray, Rees-McGee, Carrol, & Zaremba, 1987) in Shah & Morgan (1996), classroom teachers were the first to report a potential problem in 54 % of the cases referred to school psychologists. A substantial portion of these children were referred for problematic social behaviours or deficits in social competence. With further evaluation, some of these children may show psychological disorders that would warrant some type of intervention by school psychologists or other

practitioners. In what types of situations might teachers detect inappropriate or problematic behaviours in such children?

A study conducted in 1996 by Shah, F., & Morgan, S.B., was to determine if teachers could discern differences in situational social competence in children who, independent of their teachers' knowledge, had reported either high or low levels of depressive symptoms. Some research has shown that children with high scores on self-ratings of depression perceived themselves as lacking the behavioural, cognitive, and social skills involved in social competence and having tendencies towards lower assertion and greater submissiveness than their peers (Asarnow, 1988; Kennedy, Spence, & Hensley , 1989) in Shah & Morgan (1996).

The specific question addressed in the study by Shah & Morgan was whether children who reported high versus low levels of depressive symptoms on the Children's Depression Inventory (CDI, Kovacs, 1981) showed differences in social competence in specific situations as indicated by independent teacher ratings. The results of the Shah & Morgan study suggest that children who report high levels of depressive symptoms tend to have problems in situations requiring initiative in being included in peer group activities and responding appropriately to provocations by peers (such as being teased or laughed at). They also show problematic behaviour in situations in which clear teacher expectations should be met and in situations involving either failure or success.

This study elicits a complex and challenging question of " cause and effect; " that is, are children depressed because they lack social competence, or is the social incompetence the result of their being depressed, or is there an interactive or synergistic effect between these

two factors ? This question might be addressed by longitudinal studies that examine whether children with social incompetence show a greater tendency to later develop depressive symptoms, or, conversely, whether children show a significant decrease in social competence with the onset of depression.

2.8.3 Identification and assessment

It has become apparent that children suffer from depressive symptoms more often than previously thought, that these symptoms are associated with a variety of psychosocial difficulties, and that a significant proportion of depressed children will show persistent signs of affective disturbance (Kovacs, 1989). Consequently, increased attention has been devoted to identification of depression in children and adolescents.

Assessment of psychological difficulties in children presents some unique issues, one most obvious being the reliance on multiple informants about the child's symptom pattern (i.e., child, teacher, and parent reports). Teachers offer a potentially valuable source of information for early identification of childhood depression.

2.8.4 Teacher ratings and Peer ratings

Contrary to these earlier studies, a study by Ines, T.M., & Sacco, W.P. (1992) moderate correspondence was found for teacher ratings and student self-ratings of depression. Familiarity was related to correspondence, whereas confidence and student gender were unrelated to correspondence. Instruction (to teachers about depression) improved knowledge, but not correspondence. School related behaviours yielded the highest correspondence. The teacher ratings and CDI displayed high test- retest reliability.

This study examined several factors influencing the poor correspondence between teacher and student ratings of depression. First, the teacher rating scales may have ineffectively assessed their true awareness of depression in their students. In earlier studies, teachers made global judgements of overall depression level (Jacobsen et al., 1983; Lefkowitz & Tesiny, 1984) in Ines & Sacco (1992) or overall level of symptoms on four broad components of depression (Sacco & Graves, 1985) in Ines & Sacco (1992). Saylor et al. (1984) in Ines & Sacco (1992) used a modified Peer Nomination Inventory of Depression but still found a low correlation.

In addition, children who received high scores on self-ratings and peer nominations of depression were rated by their peers as being less happy and less socially skilled than children who received low scores on the depression scales (Blechman, McEnroe, Carella & Audette, 1986) in Shah & Morgan (1996). Research has also demonstrated that children with high self-ratings on depression were judged by their teachers as being low in social competence (Lefkowitz & Tesiny, 1985) in Shah & Morgan (1996). Further, children who received high self ratings and peer nominations of depression were viewed by their teachers as exhibiting conduct problems. (Jacobsen, Lahey, & Strauss, 1983 in Shah & Morgan (1996).

However, evidence indicates poor correspondence between teacher ratings and students self-ratings of depression. Four studies have found very low and typically non significant correlations (Jacobsen, Lahey, & Strauss, 1983; Lefkowitz & Tesiny, 1984; Sacco & Graves, 1985; Saylor et al., 1984) in Ines & Sacco (1992).

2.8.5 Academic Difficulties

An association between depressive disorder in young people and impaired academic performance has been documented in several studies. Puig-Antich et al (1985) found that depressed children were more impaired than normal controls for the items measuring school behaviour and school achievement. Berney et al (1991) reported that children with depressive disorder were much more likely to absent themselves from school than nondepressed psychiatric controls.

There may be sex differences in the association between academic problems and depression. Cole (1990) found in a sample of 10-year-olds that although teachers rated girls as more academically competent than boys, girls' self-ratings were no higher than boys'. Indeed, compared with teacher ratings, girls tended to underestimate their academic competence whereas boys tended to overestimate theirs. The tendency to underestimate academic competence was significantly related to self-report depression questionnaire ratings (the CDI) suggesting that children who underestimated academic competence were more likely to report depressive symptoms. Cole linked these findings to the results of Dweck et al (1978) who found that boys tended to attribute academic failure to lack of effort whereas girls attributed failure to lack of ability.

In a research article (Blechman, Tinsley, Carella, & McEnroe, 1985) in Blechman, McEnroe, Carella (1986), the social and academic competence of children in the general population was measured. It was found that a group of socially skilled children and a group of academically and socially incompetent children were each prone to a unique pattern of behaviour problems. Overall, the academically and socially incompetent children experienced the most numerous and serious behaviour problems and the lowest self-esteem.

These findings strongly suggest that the incompetent children might be exceptionally depressed. There is good reason to suspect that academically incompetent children might be depressed. Academic competence has positive associations with self-esteem (Coopersmith, 1967) in Blechman, McEnroe, Carella (1986), self-rated cognitive competence (Harter, 1982), and family income (Yando et al, 1979) and negative associations with conduct disorders (Worland & Hesselbrock, 1980; Worland, Weeks, Janes, & Strock, 1984) and risk for schizophrenia (Greenwald, Harder, & Fisher, 1982; Watt & Lubensky, 1976) in Blechman, McEnroe, Carella (1986),.

2.8.6 Conclusion

Research has found a positive correlation between school factors and the development and maintenance of depression in childhood.

2.9 Special Populations

2.9.1 Shanghai- People's Republic of China (1990)

2.9.1.1 Family Environment, Social Functioning and Academic Achievement

In a research study conducted by Xinyin Chen, Kenneth H. Rubin and Bo – shu Li, a sample of primary school children in Shanghai, People's Republic of China, participated in this 2-year longitudinal project. Information on the family environment, children's social functioning, academic achievement, and depression was collected from multiple sources. The mean depression scores in the Chinese children was found to be similar to those found for children in the West. Depression was positively associated with aggressive- disruptive behaviour and negatively associated with social competence. School, social and academic difficulties were

concurrently and positively correlated with depression. Moreover, social adjustment problems at age 8 were associated with depression at age 10. Academic difficulties were predictive of later depression only for children from families in which the mother was rejecting and parents had a conflictual relationship. Finally decline in social and academic performance was related to depressed affect.

The purpose of the study was to examine the relations between school performance and family environment and depression. Children's academic performance in school has traditionally been considered important in Chinese culture. In addition to academic achievement, establishment and maintenance of positive peer relationships are considered indices of social and even political achievement in Chinese schools (Ho, 1986) in Chen, Rubin & Li (1990). Furthermore, children's school performance in both the social and academic areas is frequently evaluated by teachers and peers in Chinese schools. It has been argued that repeated exposure to negative feedback about social and cognitive competencies inhibits the emergence of positive self-schemata and facilitates the development of depression (Cole, 1991). Given the social conditions in Chinese schools, it seems reasonable to predict that social and academic difficulties, including peer rejection, low social status, and poor academic performance, would be associated with child depression.

2.9.1.2 Results

The results of the study indicated that peer acceptance and rejection, leadership, receipt of honourship, and academic achievement were significantly correlated with depression. Furthermore, peer rejection, low social status and poor achievement at age 8 were found to be associated with depressed affect at age 10. Consistently, analyses concerning the depressed group revealed that these children were less popular and had lower social status and more

academic problems than their non-depressed counterparts both contemporaneously and 2 years earlier. Among the family variables, maternal acceptance and rejection at age 8 was found to be associated with depression at age 10.

2.9.1.3 Conclusion

These results suggested that children who had academic difficulties and were rejected by their mothers were likely to develop depression; however, children who had low academic achievement but were accepted by their mothers were not depressed at the later time. For children from families in which there was high marital conflict, poor academic achievement at age 8 was associated with depression at age 10.

2.9.2 The Newcastle Childhood Depression Project – Britain (1991)

2.9.2.1 Family Background, Adverse Life Events

The Newcastle Childhood Depression Project was conducted in Britain in 1991. In a paper entitled : " The Context of Childhood Depression ", authors Berney, T.P.; Bhate, S.R.; Kolvin, I ; Famuyiwa,O.O.; Barrett, M.L.; Fundudis, T; and Tyrer, S.P. examined the family background, premorbid personality traits and adverse life events preceding childhood depression.

2.9.2.2 Results

The results showed the following : depressed children tended to come from higher socioeconomic strata ; the parents of depressed children had higher educational

qualifications; the parents of depressed children had longer marriages than those of non depressed children; the mothers of depressed children showed a greater frequency of psychiatric symptoms; a substantial proportion of the non-depressed group had definite problems with their peers at school (30-38%),but an even greater proportion of the depressed children had such problems (44- 50%), and depression was associated with higher rates of absenteeism.

2.9.2.3 Conclusion

Overall, although the pattern that emerges suggests a variety of environmental adversities are associated with childhood disturbance, relatively few are specifically linked to depression, let alone a subtype of depression. The findings of the project suggest that non-depressive and depressive disturbances in childhood have a number of common origins and that a better picture of the extent of parental, psychiatric and psychosocial influences should be achieved by comparison with normal controls.

2.9.3 Sweden - 1997

2.9.3.1 Influence of Family Factors on Depression

The aim of a study conducted by Nilzon, K.R. & Palmerus, K . in Sweden in 1997, was to determine the influence of family factors on the onset and maintenance of depression and anxiety in children and adolescents. On the basis of previous findings, one hypothesis was that depressive tendencies in children and adolescents will be associated with less positive relationships between parents, major life events, and patterns of strict control.

2.9.3.2 Results

The major finding was that there were significant differences between DA (depressed-anxious) and non-DA families. In agreement with other research (Reynolds, 1992), 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.

2.9.3.3 Conclusion

This study could not resolve conclusively whether the characteristics found in families with depressed children should be regarded as pathogenic. Further research with larger clinical groups of depressed children needs to be conducted in order to fully explain familial aspects of childhood depression.

This chapter reviewed some relevant studies relating directly to the topic. Other indirectly related studies were included to place the study in a wider context . Chapter three will explore the topic from a theoretical perspective.

CHAPTER THREE

THEORETICAL FRAMEWORK

Chapter three presents an overview of the various theories that are relevant to the topic of childhood depression as a whole and will conclude with an in-depth discussion of the theory which framed this research. This chapter helps place the present study in context as well as giving the research a broader meaning.

3.1 INTRODUCTION

The study of depression in children and adolescents has gone through a series of contradictory formulations as theorists have attempted to understand this complex form of disorder in youngsters. Conceptualizations have ranged from the belief that depression in children was impossible due to the immaturity of ego development prior to adolescence and the concomitant inability to experience guilt (Rie, 1966), to the belief that depression in children is prevalent and may be manifested in a variety of symptoms quite divergent from those evidenced in adulthood i.e., depressive equivalents (Cytryn & McKnew, 1972; Glaser, 1967) in Cytryn, Gershon & McKnew (1996) to the assertion that symptoms indicating depression are the same across the age span from childhood to adulthood (American Psychiatric Association, 1987; Kashani et al., 1981; Puig-Antich, 1980) in Fleming & Offord (1990). Such divergence in thinking indicates that the topic of depression in childhood and adolescence is an area of active and significant theoretical and empirical inquiry.

While it is at present generally accepted that children do experience depressive feelings and disorders, there are many disparate views about the origins of depression and subsequent approaches to intervention and prevention. Many such explanations of depression in children

represent downward extensions of theory and empirical findings from the study of depression in adulthood (Rutter, Izard, Read, 1986). These explanations include, for example, depression as :

- a response to stress or negative life events,
- a consequence of distortions in cognitions or attributional style,
- a result of learned helplessness arising from reinforcement contingencies in the environment,
- the result of interpersonal skill deficits or lack of social support,
- an outgrowth of early unresolved loss or separation experiences and
- a genetically inherited disorder resulting in neurophysiological anomalies .

(Rutter , Izard, & Read, 1986)

The purpose of the present study was to determine the prevalence of depression in primary school preadolescent children. A further purpose of the study was to ascertain whether factors from home or school were contributing to the children's depression.

The critical questions that framed the research were :

1. How prevalent is depression among preadolescent primary school children ?
2. What are the factors at home that may contribute to depression ?
3. What are the factors at school that may contribute to depression ?

3.2 PSYCHOANALYTIC THEORIES

3.2.1 Introduction

Psychoanalytic conceptualizations of depression regard as central to this disorder the imagined or real loss of a valued or loved " object " through death, separation, rejection, or symbolically, through the loss of some ideal concept. In essence, therefore, classical psychoanalytic theorists view depression as a failure of the normal mourning process, and describe a depressive syndrome composed of self-criticism, guilt, loss of libido, and low self-esteem.

Furthermore, psychoanalytic theorists also emphasize the importance of loss in early childhood and the quality of the mother-child relationship in the first year of life, as vulnerability factors for subsequent depression. Bowlby, in particular, believed that adult depression is related to the failure in early childhood to form a stable and secure attachment with the parents, or to the experience of actual loss of a love object. Given this theoretical climate, a consideration of developmental issues in child depression would have been inconsequential (Gotlib & Hammen, 1992).

3.2.2 Sigmund Freud

Freud compared depression with grief, but emphasized the importance of loss of self-esteem in depression. He theorized that the anger and disappointment that had previously been directed toward a lost object are internalized, leading to a loss of self-esteem and a tendency to engage in self-criticism. Freud believed that the predisposition to this reaction to loss has its origins in a particular early childhood experience in which the young child experienced a loss of the mother, or of the mother's love. In order to lessen the impact of this loss, the child

learns to internalize a representation of the lost object. The anger directed at the lost object, however, is now directed at a part of the child's own ego, thereby predisposing to future depressive episodes following significant losses.

3.2.3 Bowlby

Bowlby (1978,) in Gilbert (1997) also emphasized the importance of early attachment experiences in predisposing an individual to later development of depression. Bowlby postulated that infants have an innate tendency to seek stimulation and promote attachment to significant objects that will provide protection and support. He argued that a specific unbroken bond to a particular person is essential for nonpathological development. If attachment bonds (typically to the mother) are disrupted, either through actual separation or emotional unresponsiveness or inaccessibility, Bowlby postulated that individuals may become vulnerable to depression.

3.3 COGNITIVE THEORIES OF CHILDHOOD DEPRESSION

3.3.1 Introduction

Cognitive formulations emphasize the importance of covert behaviours, such as attitudes, self-statements, images, memories, and beliefs. Secondly, cognitive approaches to depression consider maladaptive or irrational cognitions and cognitive distortions to be the cause of the disorder, or of its exacerbation and maintenance. Negative affect, lack of motivation, physical symptoms, and other depressive behaviours are regarded as secondary manifestations resulting from maladaptive cognitions.

There has been a surge of research designed to examine cognitive aspects of depression. In particular, two models of depression that implicate cognitive factors in the etiology of this disorder have garnered the most theoretical and empirical attention: Beck's (1967, 1976) in Kaslow, Brown & Mee (1994) cognitive theory of depression and Seligman's (1975) in Kaslow, Brown & Mee (1994) learned helplessness model of depression.

3.3.2 Aaron Beck – the cognitive triad

Beck's theory of depression focuses on three interrelated aspects of a depressed individual's cognitions. The " cognitive triad ", consists of cognitive distortions or faulty information processing, and negative self-schemas. The cognitive triad refers to a depressotypic pattern of thinking in which depressed persons exhibit a negative view of themselves, their current situation, and the future. According to Beck, the existence of the cognitive triad is apparent through the misperceptions and misinterpretations by depressed persons of their environment. Beck contends that the cognitive triad is responsible for many of the typical depressive symptom patterns, including deficits in affective, motivational, behavioural, and physiological functioning (Beck, Shaw,& Emery, 1979) in Gilbert (1997).

Beck also suggests that depressed individuals demonstrate cognitive distortions through engaging in faulty information processing. More specifically, depressed persons are characterized by a number of common systematic errors in thinking, including arbitrary inference, selective abstraction, overgeneralization, magnification and minimization, personalization and all-or-none thinking. Beck formulated the term " negative self-schema" to explain why depressed persons persist in self-defeating attitudes in the face of contradictory evidence. According to Beck's theory, schemas in the context of depression are cognitive

processes that represent a stable characteristic of (the depressive's) personality (Kovacs& Beck, 1978). In a formulation reminiscent of those offered by psychoanalytic theorists, Beck (1967) postulates that schemas develop from early negative experiences in childhood.

3.3.3 Martin Seligman - Theory of Learned Helplessness

The learned helplessness model is a similar cognitive model. The reformulated learned helplessness model of depression (Abramson, Seligman, & Teasdale, 1978) in Benfield (1988), originated with Seligman's (1975) theory of learned helplessness. Seligman advanced a model of depression based on results of his work with animals. Seligman and Maier (1967) in Kaslow, Brown & Mee (1994) found that dogs pretreated with inescapable shock were subsequently poorer at escaping shock than were dogs pretreated with escapable shock or given no prior shock. Seligman and his colleagues conducted a number of studies in which they attempted to induce learned helplessness in humans through exposure to uncontrollable stimuli (e.g., Hiroto& Seligman, 1975; Miller & Seligman, 1975) in Kaslow, Brown & Mee (1994). The results of these studies were comparable to those obtained in the animal studies: in general, subjects exposed to uncontrollable stimuli exhibited deficits in response to initiation and learning.

The learned helplessness theory, however, could not account for the loss of self-esteem in helpless subjects. Moreover, it was clear that not all people who are exposed to uncontrollable negative events become depressed; some became anxious, others angry, and some had little emotional reaction. These inadequacies in the application of the learned helplessness model to humans led to a number of reformulations of the model.

The reformulation that has received the most empirical and theoretical attention is that outlined by Abramson, Seligman & Teasdale (1978) in Benfield (1988). These theorists postulated that mere exposure to uncontrollable stimuli is insufficient for deficits in cognitive, motivational, and emotional functioning to occur; they hypothesized that persons must expect that future outcomes are also uncontrollable in order for helplessness to be induced. The theorists drew on Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum's (1971) in Kaslow, Brown & Mee (1994) dimensional structure in proposing that attributions of uncontrollability vary along three major dimensions: internal versus external locus of control, stable versus unstable conditions, and global versus specific attributions of uncontrollability.

3.3.4 A developmental perspective on cognitive theories

A developmental perspective for conceptualizing the cognitive functioning of children necessitates understanding children as organisms who are different from adults rather than deficient relative to adults, and viewing children's behaviour in the context in which it is embedded. The incorporation of notions from developmental psychology within a cognitive framework enhances our understanding of the development of competencies and deficits as manifested in depressed youth.

3.3.5 Conclusion

In sum, there is suggestion that there is support for the validity of the cognitive theories of depression in children and adolescents as well as support for the validity and continuity of the construct of depression from childhood to adulthood. The challenge for the future is to move beyond simple correlational studies that show an association between cognitive patterns and depression, to addressing questions concerned with the development of these cognitive

patterns and their specific role in the onset and maintenance of depression across the life span.

3.4 BEHAVIOURAL THEORIES OF DEPRESSION

Behavioural theories of depression focus on overt behaviours. The most influential behavioural theories are the social - skills and activity-level perspective of Lewinsohn (1974) and the self-control model of Rehm (1977) in Kaslow, Brown, & Mee (1994).

3.4.1 Lewinsohn- The Social-skill and activity- level model

The social-skills and activity-level model of Lewinson (1974) in Kaslow, Brown, & Mee (1994) has its origins in operant psychology. According to this perspective, depressed persons receive insufficient positive reinforcement from significant others due to the depressives' inadequate social skills for eliciting positive interpersonal responses. These social -skill deficits are viewed as causative in eliciting a depressogenic pattern of reinforcement. Depressed individuals are often less adept at reinforcing others, further diminishing the rate of reciprocal social reinforcement.

3.4.2 The self-Control model of Rehm

The self-control model of depression of Rehm (1977) is derived from the more general self-control theory of Kanfer (1970) that described the adaptive processes of self-monitoring, self-evaluation, and self-reinforcement. Depressed individuals are believed to have deficits in one or more specific self-control behaviours. In terms of self-monitoring, depressives selectively attend to negative events to the exclusion of positive events, and they frequently monitor immediate as opposed to delayed consequences of behaviour. Rehm's self-control model attempts to integrate behavioural and cognitive aspects of the disorder.

3.4.3 A Developmental Perspective on Behavioural theories

The organizational approach of the developmental model conceptualizes human psychology in terms of a hierarchical organization of interacting and interrelated behavioural systems. These systems are constructs, hypothesized to account for the organization of behaviour observed in naturalistic settings and in the laboratory. In psychology three general behavioural systems- cognitive, affective, and social- have been proposed by investigators adopting an organizational approach. The hierarchical integration that occurs with development takes place within each behavioural system; additionally, competencies in each system become integrated between behavioural systems (Bischof, 1975; Cicchetti & Serafica, 1981). The organization of these behavioural systems in normal development and the observed lack of organization in pathology then become two of the most central concerns of the developmental psychopathologists (Cicchetti & Schneider-Rosen, 1981) in Cicchetti & Toth (1998).

3.4.4 Conclusions and Future Directions

It has become apparent that the behavioural theories of depression have evolved from relatively simple and constricted stimulus - response formulations and emphasizing response-contingent reinforcement and the behavioural dampening effects of punishment, to more complex conceptualizations placing greater emphasis on the individual's characteristics and his/her interactions with the environment. There is a greater awareness that depressed individuals often function in demanding and stressful environments. Moreover, some investigators contend that depressed persons themselves may be instrumental in engendering much of this stress (Gotlib & Hammen , 1992).

Given this changing perspective, it is clear that behavioural researchers and clinicians must examine depressed individuals in the context of their environment (Beckham, Leber, 1995) in Kaelber, Moul & Farmer (1995).

3.5 DEVELOPMENTAL BIOLOGICAL SYSTEMS IN DEPRESSION

3.5.1 Introduction

The development of a mood disorder, as well as the age of its onset, is influenced not only by the emergence of salient issues or tasks that must be confronted but also by timed biological events that create challenges and provide new opportunities as they figure in every developmental phase. A number of investigations have shown that there is a greater prevalence of mood disorders in the relatives of depressed persons than in the general population (Weissman, Warner, Wickramaratne, Moreau , Olfson, 1997) in Cicchetti & Toth (1998) and a higher probability of disorder among relatives who are more closely related (McGuffin & Katz, 1989; Tsuang & Faraone, 1990) in Cicchetti & Toth (1998). Moreover , twin studies reveal greater concordance of depressive disorder in monozygotic rather than dizygotic twins (McGuffin & Katz, 1989). Adoption studies also have been used to disaggregate shared genetic and environmental influences. These studies have shown increased rates of depression in biological relatives as compared to adoptees (Cadoret, 1978 ; McGuffin, Katz, Watkins, & Rutherford, 1996) in Cicchetti & Toth (1998).

3.5.2 Developmental Geneticists

Developmental geneticists maintain that genetic contributions to psychopathological disorders must be conceptualized within a dynamic framework that considers the operation of genetic factors in concert with environmental factors across the life span (Goldsmith, Gottesman, & Lemery, 1997; Rutter, 1991) in Cicchetti & Toth (1998). A number of investigations have examined various biological structures and processes among depressed children and adolescents and non depressed (Birmaher, Ryan, Williamson, Brent, Dahl, et al., 1996; Dahl & Ryan, 1996) in Cicchetti & Toth (1998).

3.5.3 The Microsystem - Family factors

Investigations of family variables associated with child and adolescent depression have focused on two primary areas : families of depressed children and children of depressed parents. A number of family characteristics have been associated with the development and maintenance of depression, including parental psychopathology, family structure, and negative life events (Kaslow, Deering, & Racusin, 1994) in Cicchetti & Toth (1998). Specifically, a high incidence of psychopathology has been found in parents and extended family members of depressed children, with mothers and fathers of depressed children exhibiting increased levels of depression, anxiety, substance abuse, and antisocial behaviour (Kutcher & Marton, 1991; Puig-Antich et al., 1989; Todd et al., 1993) in Cicchetti & Toth (1998).

In examining family structure, girls from single-parent families and children of divorced parents have been found to exhibit increased levels of depression and anxiety as well as slower rates of recovery when they do experience a depressive episode (Feldman,

Rubenstein, & Rubin, 1988; Hoyt, Cowen, Pedro-Carroll, & Alpert-Gillis, 1990; Wallerstein & Corbin, 1991) in Cicchetti & Toth (1998). Moreover, low socioeconomic status also has been linked with an increased risk for depression (Garrison, Schlucter, Schoenbach, & Kaplan, 1989; Gibbs, 1985) in Cicchetti & Toth (1998). Acute and chronic life events, most typically involving significant losses through parental death, divorce, or separation, or involving child maltreatment, also have been associated with the occurrence of depression in childhood and adolescence (Burbach & Borduin, 1986; Hoyt et al., 1990; Toth, Manly, & Cicchetti, 1992) in Cicchetti & Toth (1998).

3.5.4 The exosystem – School Factors

Evidence has accumulated to suggest that, in addition to the family influences, schools and neighbourhoods contribute to patterns of academic and psychological adjustment. Therefore the school environment is likely to be implicated in the development of depression. Perceptions of being academically competent and receiving good grades have been linked with a reduced risk for emotional and behavioural difficulties, whereas low perceived academic competence is related to depressive symptoms in children (Blechman, McEnroe, Carella, & Audette, 1986; Cole, 1991).

In general, it has become increasingly clear that problems of academic alienation, poor school performance, and minor delinquency that become more prominent in early adolescence are linked to negative mental health problems such as depression that are manifested later in adolescence (Eccles, Lord, & Roeser, 1996) in Cicchetti & Toth (1998). Evidence such as this suggests that the failure of the school environment to facilitate development as children progress into middle schools may contribute to motivational and mental health problems.

3.5.5 The macrosystem

At first glance, it may seem that cultural values and beliefs are unlikely to be related to an evolving depressotypic organization and to depressive disorders. However, there are aspects of the macrosystem that have been shown to exert influences on the emergence of depression. Because societal attitudes can affect the availability of resources and supports as well as the likelihood that treatment will be sought by families with a depressed child, the macrosystem can exert a significant impact on whether depression develops as well as how it is addressed when it is present. Relatively little research has been conducted on macrosystem influences and depression in childhood or adolescence. However, research on risk for suicide sheds some light on the role of culture and adaptation.

3.6 FAMILY SYSTEMS MODELS OF CHILDHOOD DEPRESSION

3.6.1 Introduction

The family systems model emphasizes the bidirectional nature of the etiological factors in childhood depression. It seems that depressed children often come from families in which there are high rates of psychopathology and / or disturbed family functioning of one kind or another. There are numerous possible mechanisms that could explain these links, such as genetic processes or exposure to family discord or through the modeling of a parent's negative attributional style. However, all these theories tend to explain depression through a linear series of cause and effect chains.

3.6.2 Family Systems Theory

In systems theory a different approach is taken in which there is a focus on the relationship between members in the family. Systems thinking derives from the ideas of mutual causality, of homeostasis, and from the notion that the whole is qualitatively different from its parts.

Depression can therefore be formulated as a consequence of dysfunctional maintenance of the family equilibrium.

There have been a few attempts to investigate the family environments of depressed children using the kinds of instruments that would be familiar to researchers interested in systems theory. However, the research that has been published so far has produced some positive findings. Forehand et al (1988) reported that depressive symptoms were associated with the number of conflicts that young people reported with their parents.

3.6.3 Limitations of Systems Theory

One of the problems with this kind of research is that, although its focus is on bi-directionality, its tools are essentially unidirectional to the extent that one subject is asked to report on his/her view of the family. So, although systems thinking may have a part to play in enhancing understanding of certain aspects of childhood depressive disorders, such as their tendency to run in families, it seems unlikely that it can offer a complete model (Harrington, 1990).

3.7 DEVELOPMENTAL PSYCHOPATHOLOGY

3.7.1 Introduction

The developmental psychopathology approach to understanding depressive disorders in children and adolescents represents a comprehensive undertaking that seeks to unify contributions from multiple fields of inquiry into an integrated whole (Cicchetti, 1990). Because adaptation is viewed as a product of both current circumstances and conditions and prior experiences and adaptations (Sroufe, Egeland, & Kreutzer, 1990) in Cicchetti & Toth (1998), depression is best understood in terms of current risk and protective factors within the context of prior developmental experiences that have been hierarchically integrated into the individual's organization of biological and behavioural systems.

Developmental psychopathology draws attention to both the similarities and the differences among normal and psychopathological conditions. As a result we are able to distinguish the specific pathways leading to various psychopathologies (e.g., depression) as well as to understand the commonalities underlying both normal and psychopathological functioning. Through this integrated developmental approach, informed direction is given to efforts to prevent depressive disorders as well as to the provision of intervention for those who are already experiencing depression,

Because developmental psychopathology is a newly emerging discipline, there is much to be accomplished in advancing a developmental understanding of depression. The burgeoning literature emanating from attachment theory on internal representational processes is likely to prove fruitful in providing increased depth to our understanding of how organizations of affective, cognitive, representational, and interpersonal experiences are carried forward

developmentally and affect the course of adaptation and the evolution of depressive disorders.

3.7.2 What is Developmental Psychopathology ?

It is frequently presumed that any study involving children represents a “ developmental “ investigation. However, it is certainly possible to study children from a nondevelopmental perspective. Age, in and of itself, does not necessarily signify that a developmental process has been specified (Rutter, 1989).

Developmental psychopathology is concerned not only with children but also with individuals across the life span. The developmental approach is charged with two inter-related goals. First, the developmental perspective seeks to examine the specific evolving capacities that are characteristic of individuals at varying developmental stages across the life span. Second, a developmental analysis seeks to examine the prior sequence of adaptations in development that contribute to an outcome in a particular developmental period.

Depressive disorders occur at any point in the lifespan. The belief in continuity of depression across the lifespan is reflected in the DSM - IV through the directive to apply a single set of criteria to children, adolescents, and adults.. Developmental concerns are acknowledged, in that diagnosticians are permitted to make certain substitutions when establishing a diagnosis of depression. For example, in children, irritable mood is weighted as equivalent to an adult’s depressed mood. Similarly, the failure of a child to attain an expected weight gain is considered equivalent to the adult symptom of weight loss (Speier, Sherak, Hirsch, Cantwell, 1995).

Shafii and Shafii (1992) in Kashani & Schmid (1992) have proposed a comprehensive examination of the developmental psychopathology of depression and its manifestations. Their analysis of depressive symptoms in children considers two kinds of pathological deviation from the norm. The first is “ transformation ” in which developmental progress can be seen as derailed and now proceeding on a deviated course; the symptoms seen in this case are clearly distortions and disruptions of normal development. The second deviation from normal development is “ regression ” in which the child no longer has access to previously acquired skills or functions; this response is similar to the depressive withdrawal seen in deprived or disappointed infants.

Another issue of importance regarding the developmental approach of the psychopathologist is the wish to extend the developmental perspective into adult life. Psychologists emphasize that developmental tasks and crises occur in adult life as well as in childhood, and that the ways in which early developmental issues are handled may influence the impact of later ones.

Rutter (1986) hypothesized at least seven main ways in which early experiences might be linked with psychiatric disorders occurring some years later:

- They may lead to an immediate disorder, with this disorder persisting into adult life for reasons that are largely independent of the initial causation or provocation.
- They may lead to bodily changes, which in turn influence later functioning. The change in the neuroendocrine system following acute physical stresses in infancy constitute a case in point.

- They may lead directly to altered patterns of behaviour, which although changed at the time of the event, take the form of overt disorder only some years later. The long term social sequelae of an institutional upbringing may represent an example of this kind.
- They may lead to changed family circumstances, which then in turn predispose to a later disorder.
- They may operate through their action in altering sensitivities to stress or in modifying styles of coping, which then protect from, or predispose toward a disorder in later life.
- They may alter the individual's self-concept or attitudes or cognitive set, which then in turn influence the response to later situations.
- They may have an impact on later behaviour through effects on the selection of environments or on the opening up or closing down of opportunities.

There is much evidence for the continuity of depressive disorders. Milder presentations in childhood may represent prodromes of major disorders. Kovacs and Gatsonis (1989) found that two thirds of a sample of children with dysthymic states developed a major disorder over the next five years. Other studies (e.g., Poznanski, 1982) have found that childhood depression is continuous with the adult disorder and that these children are at higher risk for

hospitalization and psychotropic drug use and are three times more likely to make suicide attempts(Harrington et al., 1991).

3.7.3 Principles of Equifinality - Multifinality

The principles of equifinality and multifinality derived from general systems theory are relevant in developmental theories (von Bertalanffy, 1968) in Cicchetti, Rogosch & Toth (1994). Equifinality refers to the observation that a diversity of paths may lead to the same outcome. As such, a variety of developmental progressions may eventuate in depression, rather than positing a singular primary pathway to disorder. In contrast, multifinality suggests that any one component may function differently depending on the organization of the system in which it operates. Thus, for example, loss of a major attachment figure in childhood will result in numerous outcomes for children depending on the context of their environment and their individual competencies and coping capacities (Cicchetti & Toth, 1998).

Given the diversity in process and outcome apparent in development, it should not be surprising that a developmental psychopathology approach to depression does not have a simple, unitary etiological explanation. The occurrence of depression during the life course most likely results from a multiplicity of pathways in different individuals. Although commonalities in pathways in different clusters of depressed children may be delineated, it is also possible that depression is not the only outcome associated with each pathway. Thus the study of depression needs to be part of a larger body of inquiry into the developmental patterns that promote adjustment difficulties and psychopathology (Cicchetti & Toth, 1998).

3.7.4 Nature versus Nurture variables within the Developmental Model

Among the risk factors the developmental model dwells on most extensively for diagnosing depression are those arising from child environmental transactions. The model suggests that risk factors that shape these transactions may be characterized as either "genetic" or "environmental ", and that these two categories of factors may interact in potentially subtle ways.

As Kendler and Eaves (1986) in Cichetti & Sneider-Rosen (1986) argue, discerning the etiology of psychiatric disorders necessitates an understanding of pertinent genetic risk factors, pertinent environmental risk factors, and the mechanism of interaction between these two sets of variables. They have further divided the domain of the environment into two states, the "protective environment " and the " predisposing environment ". Contact with the protective environment (e.g., maternal nurturance) reduces the likelihood of psychiatric disturbance. Conversely, contact with the predisposing environment (e.g., maternal abuse) enhances the probability of illness.

3.7.5 Conclusions and Future Directions

The developmental psychopathology perspective proffers important insights useful for efforts to prevent depressotypic organization from evolving into depressive disorders as well as for intervention once depression has occurred (Kellam, 1990 ; Kellam & Rebok, 1992). Understanding the organization of psychological and biological developmental domains

among the offspring of depressed parents and among depressed children and adolescents is invaluable for conceptualizing the meaning of symptom expression and the capacities of different depressed persons to benefit from different types of treatment (Shirk & Russell, 1996).

3.8 CONCLUSION

Future research will benefit from increased attention to the interface between the psychological and biological domains. How, for example, might insecure internal representational models affect neuro-physiological functioning, and how might genetic heritage alter tendencies for certain forms of representational processes to occur ? Future research also should provide more detail regarding the differential strength of various risk and protective factors in development and how these vary during different developmental periods.

Diversity in process and outcome are the hallmarks of the developmental perspective. It is expected that there are multiple contributors to depressive outcomes in any individual, that the contributors vary between individuals, that there is heterogeneity among depressed children in the features of their depressive disturbance, and that there are numerous pathways to any depressive outcome (Cicchetti & Toth, 1998).

It will be recalled that the purpose of this study was to investigate the prevalence of depression in preadolescent primary school children. As stated by the developmental psychologists depression could be the result of numerous pathways. This study investigates two of these pathways i.e. home factors and school factors. Chapter four discusses the methodology used in investigating the purpose of this study.

CHAPTER FOUR

METHODOLOGY

This chapter will outline the research method employed in this study and describe the location of the study, the respondents, the measuring instruments, and the procedure of the study.

4.1 SELECTION OF TOPIC

4.1.1 Introduction

Research in education is a disciplined attempt to address questions, solve problems, and test hypotheses through careful collection and analysis of data for the express purpose of description, explanation, generalization and prediction (Babbie, 1977).

However, the researcher must not lose sight of the aims and objectives of the research. That means in the final analysis the research must be able to make valuable and positive inputs into existing knowledge around the topic of research and this could be achieved via the clarification of those aspects that lead to confusion, debates and even misunderstandings, prior to the research being undertaken (Anderson , 1990).

Based on the above the present study is an example of a case study, which typically gathers data at a particular point in time with the intention of :

- describing the nature of existing conditions;

- identifying standards against which existing conditions can be compared;
- determining the relationships that exist between specific variables
(Cohen et al., 1980)

4.1.2 Critical questions

The critical questions that would be answered by the study are:

1. How prevalent is depression in preadolescent primary school children ?
2. What are the factors at home that could contribute to depression ?
3. What are the factors at school that could contribute to depression ?

4.1.3 Ethical Considerations

Ethical considerations were crucial in the study due to the nature of the statements in the questionnaire and the sensitivity of the subject matter.

Fully informed consent was obtained from the Department of Education of Kwa Zulu Natal (Appendix 1), the principal of the school (who obtained permission from the educators) (Appendix 2), the parents of the respondents (Appendix 3), and the respondents (Appendix 4).

4.2 PURPOSE OF STUDY

As it was not the intention of the researcher to make this a comparative study of primary schools in the area, the researcher decided to use a case study format. This would allow the researcher to make generalized comments on the aspects that may contribute to depression in pre adolescent children.

The purpose of this study was to investigate the prevalence of depression in a sample of male and female pre-adolescent children from a school in the residential suburb of Reservoir Hills.

4.2.1 Structure of the study

The present study has been structured around the following steps:

1. the transformation of the problem into specific variables that can be measured;
2. the use of an inventory and a questionnaire to measure these variables;
3. the collation and organization of the data for analysis;
4. the processing and interpretation of the data.

4.3 SELECTION OF METHOD

A number of options are available to the social scientist/researcher for information gathering.

The selection of the method depends on the orientation of the researcher and the resources

available. In studying social phenomena qualitative methods of data collection yield a rich variety of insight and information (Bless & Achola, 1988).

A direct way of obtaining information is the interview. This process involves direct, personal contact with the participant who is expected to answer questions. However , this method does not allow for a direct comparison of answers between respondents. Interviewing was not feasible because it would have required too much time as respondents would have had to be interviewed over a number of days (Bless & Achola, 1988).

Observation provides the researcher with the opportunity to observe behaviour in a natural setting in order to grasp the dynamics of interaction. However, phenomena like depression are difficult to observe directly. Since the aim of the present study was to specifically assess the prevalence of depression and the factors that could contribute to it, direct observation was not an option. However in neglecting this method a lot of valuable information about the respondents' opinions , feelings, and views have been sacrificed (Bless & Achola, 1988).

After careful consideration of the difficulties associated with qualitative methods viz., the time factor, the inherent subjectivity (both on the researcher's and respondents' part) and access to respondents over a period of time, a decision was taken to pursue a more objective type of data collection.

Data for this study was collected using the Children's Depression Inventory (CDI) and a specially drawn up Questionnaire.

4.4 THE LOCATION OF THE STUDY

Up to the present, to the best of my knowledge, no study on the prevalence of depression has been undertaken in the area of Reservoir Hills , an inner western suburb of the city of Durban, in the province of Kwa Zulu Natal.

Ideally such a study should include a cross section of primary schools in Reservoir Hills. However, practical considerations such as limited time available and limited resources made it necessary to scale down the sample size. The sample size used in this study ensured that the study was completed within a reasonable time. However, care was taken not to make the sample size so small that the findings would be questionable and that the generalizability of findings would be limited.

The study is located in a primary school in Reservoir Hills, an inner western suburb in Kwa-Zulu Natal.

4.5 RESPONDENTS

The children in this study were 68 sixth grade learners (28 boys and 40 girls) from a school set in the middle class neighbourhood of Reservoir Hills. However, almost 60 % of the sample came from former disadvantaged schools and lower socioeconomic areas. The respondents ranged from 11 to 13 years.

The racial composition of the sample was as follows :

- 57.4% African learners
- 4.4% Coloured learners

- 38.2 % Indian learners.

The respondents were drawn from Resmount Primary School, which is in a middle class suburb formerly for Indians. However, the demographics of the area, as well as the school, is slowly changing in that learners from previously disadvantaged schools and areas have now started living or travelling to attend school in Reservoir Hills. According to the parents of these learners, the reason for this change is that the quality of education is of a better standard than in the predominantly African areas (the researcher taught at this school for 20 years prior to commencement of this study).

Grade 6 learners were selected as it was the end of the intermediate phase. Grade 7 begins a new phase in secondary school. Almost all the respondents were in the pre adolescent phase of their development. Adolescence brings with it its own angst and depression is either masked or shadowed by other comorbid factors. The respondents ranged from 11 to 13 years.

4.6 MEASURING INSTRUMENTS

4.6.1. The Children's Depression Inventory (CDI)

The CDI is a measure of children's depression developed by Kovacs and Beck (1977) in Kovacs & Feinberg (1984). It is a self-report questionnaire consisting of 27 items concerning the subject's cognitions, affects, and behaviours. Scores on the CDI range from 0 (nondepressed) to 54 (extremely depressed).

The CDI is designed for school-aged children and adolescents. It requires the lowest reading level of any measure of depression for children. The instrument quantifies a range of

depressive symptoms including disturbed mood, hedonic capacity, vegetative functions, self-evaluation, and interpersonal behaviours. Several items concern the consequences of depression in contexts that are specifically relevant to children (e.g. school). The scale is suitable for youngsters aged 7 to 17 years.

Each CDI item consists of three choices, keyed 0, 1, or 2, with higher scores indicating increasing severity. For each item, the meaning can be summarized by the following :

Item score	Meaning
0	Absence of symptom
1	Mild symptom
2	Definite symptom

The child uses the options to rate the degree to which each statement describes him or her for the past two weeks. The CDI total score can range from 0 to 54. About 50% of the items start with the choice that reflects the greatest symptom severity; for the rest, the sequence of choices is reversed.

Interpretation of the CDI should be based upon individual item responses, the total CDI score, the factor scores and their elevations, and an integration of the test data with information from additional sources which might include clinical interviews with the child and a direct observation of the child's behaviour. Combining information from the CDI and direct clinical observation gives the individual clinician or service provider a more comprehensive and ecologically valid view of the child than might be obtained from any one source (Kovacs, 1980 /1981).

The CDI is an efficient and cost-effective screening procedure. It is easy to administer, score and interpret. It measures symptoms of depression among children and adolescents. As such it can be used as part of a routine screening device in a number of settings including schools, outpatient clinics, and treatment centres. Kovacs (1980/ 1981) found that the CDI was significantly correlated ($r = .55$) with clinicians' ratings of depression and that 10 % of a normal sample of children score above 19.

Also Hershberg, Carlson, Cantwell, and Strober (1982) in Harrington (1993) found that children diagnosed as depressed with Research Diagnostic Criteria (Spitzer, Endicott, & Robins, 1978) in Harrington (1993) score higher on the CDI than other children. Use of the Children's Depression Inventory (CDI: Kovacs, 1983) to screen for depression and to quantify depressive symptomatology appears supported by the empirical literature (Hodges, 1990).

4.6.1.1 Scoring on the CDI

For each item, a number appears next to the box that is marked. For example, if the child responded, " I am sad once in a while. ", the box containing the response will be next to the number " 0" . To calculate the total CDI score, the score for each item (Item 1 through to Item 27) is added. The total is written in the box on the top upper right hand side of the scoring sheet labelled, " TOTAL CDI SCORE ".

To score the factor scales, a letter is printed next to each item on the scoring sheet. For example, " Item 1: the letter A appears above item 1; Item 2 : the letter E appears above item 2 , and so on. Add the individual item scores for all the A's and enter the total in the box labelled, " SCALE A - TOTAL (Negative self-esteem.)

Next, add the scores for the items labelled B and enter the total in the box labelled, " SCALE B TOTAL (Interpersonal problems). Continue in a similar manner for the remaining scales (SCALE C (Ineffectiveness), SCALE D (Anhedonia), SCALE E (Negative self-esteem).

4.6.2. The Questionnaire

A specially designed Questionnaire(Appendix 6) was developed for the purposes of this study. Therefore there are no norms or other statistical data. The purpose of this Questionnaire was to ascertain whether depressed children (according to the CDI) found issues at home or school more problematic. Statements were phrased in a positive way to eliminate bias for selection .The Questionnaire was divided into two sections : Home section and School section.

Each section was sub- divided into 4 sub-sections each. The home section was sub- divided into :

- A. Relationship with parents .
- B. Relationship with siblings.
- C. Self Perception at home.
- D. Living conditions at home.

The School section was divided into :

- E. Relationship with Teacher
- F. Relationship with Peers.
- G. Self Perception at School.
- H. Self Perception –Achievement at school.

The Questionnaire contained a series of close ended statements. Close ended statements were used because they are quicker to respond to, and easier to answer. This makes it possible to go through more statements within a given period of time. Respondents answered Yes or No for each statement.

The first part of the questionnaire consisted of details relating to biographical details . The second part consisted of twenty statements about home conditions. This was subdivided into 4 sub-sections (see above) of 5 statements each .

The third part consisted of twenty statements relating to school issues. This was subdivided into 4 sub-sections (see above) of 5 statements each.

The fourth part consisted of two open ended questions. It allowed the respondents to further elaborate on their concerns both in the school and home environments.

4.6.2.1 Scoring on the Questionnaire

Each of the items on both the home section and the school section are answered either “ yes” or “ no”. A “yes” response could indicate that an item may be a contributing factor to the child's unhappiness or depression. All the “yes” responses are added to give a sub- total score on the home section. All the “yes “ responses on the school section are added to give a sub- total score on the school section. The two sub- total sections are then added to give a total Questionnaire score.

Each of the 4 sub-sections consisted of 5 statements, giving a sub-section score of 20 for the home section and a sub-section score of 20 on the school section. The total Questionnaire score is therefore 40.

4.7 PROCEDURE OF STUDY

4.7.1 Pilot Study

A pilot study was conducted to validate the Questionnaire by identifying and assessing possible problems that commonly appear during the study proper. The pilot study was thus an attempt to clear up confusion and misunderstandings that were directly related to the Questionnaire. The pilot study was specifically carried out to test for some of the following problems :

- time management and length of questionnaire
- ambiguities and confusion of terminologies and concepts
- grammatical errors
- repetition

A pilot study was conducted with a sample of 10 pupils from a neighbouring school. The pupils were matched on grade, age groups, sex, residential areas, race groups. The CDI and the Questionnaire were both administered on the same day with a ten minute interval in between. The pilot study revealed that the attention span of the pupils was limited to 30 minutes. It was also evident that at a certain time of day the pupils minds were preoccupied with other activities. Hence it was decided to administer the CDI and Questionnaire on separate days for the full study at Resmount Primary.

There were no serious problems were found on the Questionnaire. Two revisions needed to be effected to the Questionnaire : the word sibling was replaced by brothers and sisters; and two open ended questions were added to the end of the Questionnaire. No changes needed to be made to the layout of the Questionnaire.

The CDI and the Questionnaire were found to be suitable instruments for the purposes of this study.

4.7.1.1 Value of Pilot Studies

The value of the pilot studies is the following :

- To provide the researcher with ideas, approaches and insights not noticed earlier,
- To save the researcher time and money on a project that may yield less than expected,
- To give the researcher the opportunity of trying out a number of alternatives, measures and procedures and then selecting those that are likely to yield the best results.

4.7.1.2 Conclusion of Pilot Study

The pilot study in this investigation enabled the researcher to add open ended questions to enhance a sub section of the Questionnaire and to take a decision to administer the CDI and Questionnaire on different days .

On conclusion of the pilot study the following were arrived at :

Time management and length of Questionnaire were satisfactory in terms of the allocated time.

All items were pertinent and covered all aspects of the critical questions. There were no ambiguities, or grammatical errors. The terminology used in the Questionnaire was of a level that would be easily understood by grade 6 pupils. In conclusion the pilot study proved that the CDI and the Questionnaire were very suitable instruments to use in the present study.

4.7.2 Preliminary Visits

At the initial meeting, the researcher outlined the nature of the study and all related issues to the principal of the school. Although the researcher requested the presence of the two educators from whose classes the respondents were selected, they were unavailable. The principal offered to pass on to them all pertinent issues. In conclusion the principal agreed verbally to allow the study to be conducted if the following conditions were met ;

- permission from the education department prior to commencement of study
- informed consent from parents be obtained prior to commencing the study
- informed consent from respondents be obtained
- permission from the educators concerned
- that the time spent conducting the research be on school days, in school time, on school premises, and not impact too heavily on instruction time.

The researcher assured the principal that all conditions would be met.

On the second visit to the school, the researcher handed all letters requiring permission to the principal. The principal offered to hand the departmental letter personally to the relevant

departmental official. The researcher met with the two educators briefly. They indicated that they had no objections to the study being conducted. Subsequently the principal informed the researcher that verbal permission was granted by the Department of Education.

The respondents were then briefed on the nature of the study. It was emphasized that participation was dependent upon parental permission. They were then given parental consent forms in envelopes which they had to return to the researcher as soon as they could. Consent was then sought from the respondents themselves. All respondents were willing to participate. All parents gave permission for their children to participate in the study.

4.7.3 Administration of tests

Data collection was conducted during school hours, in the classrooms they normally occupy for daily lessons. Although this did not afford the privacy needed, it was satisfactory as there were minimal disruptions to the proceedings.

The respondents were assured of the anonymity of their responses. In order to obtain maximum co-operation and honesty of responses, respondents were told that they did not have to write their names. They were assured that the school staff, as well as their parents were not associated with the CDI or the Questionnaire in any way. This protected the anonymity of the respondents, thereby enabling them to respond openly and honestly to the questions and statements.

Those respondents who chose not to write their names, were asked to write their register numbers on both the CDI and the Questionnaire. This information was essential for statistical purposes.

4.7.3.1 Administration of the CDI

A discussion of issues of confidentiality, honesty of responses and nature of the study preceded the administration of the CDI. Instructions for completing the CDI were given. The respondents were then asked to complete the CDI. They were given the option of asking for assistance from the researcher. They were each given a pen and pencil. The administration of the CDI was completed within 30 minutes.

4.7.3.1.1 General observations during the administration

It was observed that when the CDI was being administered to the second group of respondents, many respondents were just ticking an option without really reading the three options. After the completion of the CDI, it was realized while conversing with them that their reading ability was below what was expected of their grade level.

The researcher had enquired of the educators prior to the administration of tests about this, but she was assured that all was well in terms of their reading ability. The researcher then took a decision to administer the Questionnaire using a different method to what was planned upon at the outset of the study.

Previous research has shown that CDI scores obtained in group administration do not differ significantly from those obtained in individual administration (Saylor, Finch, Baskin, Saylor, Darnell, & Furey, 1984) in Saylor, Finch, Baskin, Furey, Kelly (1984).

4.7.3.2 Administration of the Questionnaire

The Questionnaire was administered on a different day from the CDI. The respondents were reminded about the nature of the study, issues of confidentiality, and the need for honesty of responses.

The researcher then decided to read the statements of the Questionnaire to the respondents allowing sufficient time for responses. Although this may have slowed down the completion of the Questionnaire by those who could read adequately, the upside was that all respondents finished at the same time and all respondents were presented with the statements in a uniform way. This worked well because it seemed the respondents (having been relieved of reading the statements themselves) responded more honestly.

The Questionnaire was completed in 45 minutes.

4.7.4 Conclusion

The researcher ensured throughout the administration process that due attention was given to the following aspects :

- an explanation of the research to all respondents
- the need for honest answers
- the confidential nature of the research
- the study was in no way linked to the educators , the school or their parents

CHAPTER 5

ANALYSIS OF DATA

5.1 Introduction

This chapter presents a summary of the analyses of all the data that was collected.

The overall purpose of this study was to investigate the prevalence of depression in preadolescent primary school children. More specifically the purpose was to identify and describe any factors at home or at school that could be contributing to that depression. The CDI was useful in trying to answer the first critical question. The Questionnaire on the other hand, was designed to assist in answering the second and third critical questions. The critical questions in this study are :

1. How prevalent is depression in preadolescent primary school children ?
2. What are the factors at home that may contribute to depression ?
3. What are the factors at school that may contribute to depression ?

The data gathered in the course of investigating the general and specific purposes of this study also provides insight and information on other issues which are linked to the concept of depression in children.

Depression is a very complex phenomenon and is a result of interrelated factors. The study of such interrelatedness is however, beyond the scope of this study. The study of childhood

depression has been receiving increasing attention . The number of studies, however, need to keep up with the amount of attention the topic has attracted. This study was conducted in an attempt to fill the gap in the research of childhood depression in preadolescent children.

In order to systematize and facilitate the handling of the information obtained from the CDI and the Questionnaire, the data was organized around the following :

1. To examine if there are differences between depressed and non depressed respondents on the CDI, in respect of the variables of race, gender, age, area living in, and adults living with.
2. To establish if the means of the scores of the depressed sample are higher on the sub-sections of the home section or sub-sections of the school section of the Questionnaire.
3. To establish if there is a relationship between the CDI total and the Questionnaire total.

In an ideal situation all the factors which lead to depression should be identified and their interrelatedness shown. However , this is beyond the scope of this study. It must be borne in mind that for each individual , depression is a result of a unique mix of biological, environmental, genetic, social, cognitive, behavioural and personality factors. Without losing sight of the interrelatedness of these factors, it is helpful to disentangle some of the major factors from this conglomeration of influences and study them separately.

A longitudinal study which concentrated on some of these major factors was conducted by Chen, X., & Rubin, K.H. in Shanghai, People's Republic of China in 1995. The purpose of the study was to examine the relations between school performances and family environment and depression. The results of the study indicated that depression was significantly correlated with peer rejection, low social status, low academic achievement, maternal acceptance / rejection, marital conflict and self esteem.

The relevance of the above study for the present study is the similarity in the purpose. In the present study, the specific purpose is to ascertain if depression is a result of factors from home or school. It is against this background that the researcher has ventured to itemize a limited number of issues in the Questionnaire, issues which taken together should provide an impression of the phenomenon of depression in preadolescent children.

The two instruments that were used to collate this information were the Children's Depression Inventory (CDI) and a specially designed Questionnaire. The CDI is the most commonly used, well researched inventory in the screening of depression in children. The factor scales on the CDI are Negative Mood, Interpersonal problems, Ineffectiveness, Anhedonia, Negative Self Esteem.

The factors on the Questionnaire are the home section and the school section. The sub-sections on the Home section are : Relationship with Parents; Relationship with Siblings; Self Perception at home; and Living Conditions. The sub-sections on the School section are : Relationship with Teacher; Relationship with Peers; Self perception at school and Self Perception of Achievement.

As far as possible, the general organization of the tabled data from the CDI and the Questionnaire will correspond closely with the order in which the purposes of the study were stated. In this way it will be possible to link a particular purpose and the relevant data .

The initial subject pool included 78 grade 6 pupils from a public school in Reservoir Hills, a suburb of Durban in the province of Kwa-Zulu Natal. Participation was on a voluntary basis and required parental consent. All pupils returned affirmative parental consent forms, signed consent forms themselves, and chose to participate when asked in the classroom. Of the 78 respondents, 10 failed to complete either the CDI or Questionnaire because of absence, therefore their data was unusable in the subsequent analyses. Thus the total number of respondents ultimately employed in this study was 68, 40 females and 28 males. The age range of respondents was 11 to 13 years.

5.2 Prevalence of Depression

Table 5.1 Prevalence of Depression – CDI total

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Non depressed	61	89.7	89.7	89.7
Depressed	7	10.3	10.3	100.0
Total	68	100.0	100.0	

The above statistics show that 10.3 % of the sample were categorized as depressed according to their scores on the CDI. The results are similar to a study conducted by Blumberg and Izard (1985). The sample consisted of 150 rural schoolchildren aged 10 – 11 years. Three

different depression inventories were administered (one was the CDI). The analysis of the data reflects that 10.6 % of the sample was depressed.

Table 5.2 Prevalence of Depression According to Age

GENDER				CDI Total		Total
				Non depressed	Depressed	
Male	Age 11	Count	11		11	
		% of Total	39.3%		39.3%	
	12	Count	7	2	9	
		% of Total	25.0%	7.1%	32.1%	
	13	Count	6	2	8	
		% of Total	21.4%	7.1%	28.6%	
Total	Count	24	4	28		
	% of Total	85.7%	14.3%	100.0%		
Female	Age 11	Count	20		20	
		% of Total	50.0%		50.0%	
	12	Count	15	2	17	
		% of Total	37.5%	5.0%	42.5%	
	13	Count	2	1	3	
		% of Total	5.0%	2.5%	7.5%	
Total	Count	37	3	40		
	% of Total	92.5%	7.5%	100.0%		

Data from the above table show that of the sample of 68 :

- 45.5 % were 11-year-olds
- 38.2 % were 12-year-olds
- 16.1 % were 13-year-olds

The data also reveal that :

- There were no depressed 11- year- old boys or girls.
- 7.1 % of 12-year-old boys were depressed ; 5.0 % of 12-year-old girls were depressed.

- 7.1 % of 13- year- old boys were depressed while 2.5 % of 13- year- old girls were depressed.

Table 5.3 Prevalence of Depression according to Gender

			CDI Total		Total
			Non depressed	Depressed	
GENDER	Male	Count	24	4	28
		% of Total	35.3%	5.9%	41.2%
	Female	Count	37	3	40
		% of Total	54.4%	4.4%	58.8%
Total		Count	61	7	68
		% of Total	89.7%	10.3%	100.0%

The sample contained 28 males and 40 females. Analysis of the data reveals that :

- of the 41.2 % of male respondents, 5.9.% were depressed.
- of the 58.8.% of female respondents, 4.4 % were depressed.

In pre-pubertal children it seems that depressive disorders are just as common in boys as in girls (Costello, 1989; Velez, Johnson, & Cohen,1989) in Gilbert (1997). Some studies have reported that there is a male preponderance (J. Anderson et al., 1987) in Fleming, Offord (1990).

Table 5.4 Prevalence of Depression According to Race

		CDI Total		Total
		Non depressed	Depressed	
Race A	Count	35	4	39
	% of Total	51.5%	5.9%	57.4%
C	Count	1	2	3
	% of Total	1.5%	2.9%	4.4%
I	Count	25	1	26
	% of Total	36.8%	1.5%	38.2%
Total	Count	61	7	68
	% of Total	89.7%	10.3%	100.0%

Key

A ---- African

C ---- Coloured

I ---- Indian

The tabled data show that :

- 57.4 % of the sample was African
- 4.4 % of the sample was Coloured
- 38.2 % of the sample was Indian

The statistics reveal that of the 10.3 % of the sample that was depressed:

- 5.9 % were Africans;
- 2.9 % were Coloureds; and
- 1.5 % were Indians.

Some authors have found the prevalence of depression to be similar for all races (Raft et al ., 1977; Steele, 1978) in Kashani & Schmid (1992). Others however, have found differences (Adebimpe et al, 1982; Roberts et al., 1981) in Kashani & Schmid (1992).

Table 5.5 Prevalence of Depression According to Area Living In

			CDI Total		Total
			Non depressed	Depressed	
Area respondent lives in predominantly	African	Count	29	5	34
		% of Total	42.6%	7.4%	50.0%
	Coloured	Count	30	1	31
		% of Total	44.1%	1.5%	45.6%
	White	Count	2	1	3
		% of Total	2.9%	1.5%	4.4%
Total	Count	61	7	68	
	% of Total	89.7%	10.3%	100.0%	

The data from the above table show that :

- 50 % of the sample live in a predominantly African area;
- 45.6 % of the sample live in a predominantly Indian area;
- 4.4 % of the sample live in a predominantly White area.

The data from the above table reveal the following statistics:

- of the respondents living in the predominant African areas, 7.4 % are depressed;
- of the respondents living in the predominant Indian areas, 1.5 % are depressed;
- of the respondents living in the predominant White areas, 1.5 % are depressed.

Table 5.6 Prevalence of Depression According to Adult Living with

			CDI Total		Total
			Non depressed	Depressed	
Living with	Both parents	Count	37	3	40
		% of Total	54.4%	4.4%	58.8%
	Only Mum	Count	19	3	22
		% of Total	27.9%	4.4%	32.4%
	Grandparents/Guardians	Count	5	1	6
		% of Total	7.4%	1.5%	8.8%
Total		Count	61	7	68
		% of Total	89.7%	10.3%	100.0%

The data from the table above reveal that :

- 58.8 % of the sample live with both parents
- 32.4 % live with Mum only
- 8.8. % of the sample live with their grandparents or guardians

Of the 68 respondents :

- 3 living with both parents were considered depressed and this represented 4.4 % of the total sample
- 3 living with only their mothers were considered depressed and this represented 4.4 % of the total sample
- 1 living with grandparents or guardians was considered depressed and this represented 1.5. % of the total sample

Table 5.7 The Factor Scales of the CDI

CDI Total		CDI scale A	CDI scale B	CDI scale C	CDI scale D	CDI scale E
Non depressed	Mean	1.95	.87	1.43	3.23	1.41
	N	61	61	61	61	61
	Std. Deviation	1.892	1.132	1.271	2.117	1.101
	Minimum	0	0	0	0	0
	Maximum	7	5	6	9	4
Depressed	Mean	4.71	3.43	4.57	7.86	4.14
	N	7	7	7	7	7
	Std. Deviation	2.059	1.718	1.397	2.673	1.952
	Minimum	2	2	2	4	2
	Maximum	7	7	6	12	8
Total	Mean	2.24	1.13	1.75	3.71	1.69
	N	68	68	68	68	68
	Std. Deviation	2.074	1.424	1.596	2.580	1.458
	Minimum	0	0	0	0	0
	Maximum	7	7	6	12	8

Scale A (Negative Mood) – A mean score of 4.71 for the depressed group as compared to 1.95 for the non depressed group, could mean that there was a higher level of negative mood in the depressed group.

Scale B (Interpersonal Problems) – Compared to the non depressed group’s mean score of .87, the depressed group’s mean score of 3.43 could indicate more interpersonal issues.

Scale C (Ineffectiveness) - the higher mean of 4.57 of the depressed group indicates that this group could perceive themselves as socially and academically incompetent.

Scale D (Anhedonia) – It was expected that the depressed group would have higher scores on this scale and the mean of 7.86 assists in confirming one aspect of the depression profile.

Scale E (Negative Self-Esteem) – The depressed group’s higher mean of 4.14 could possibly indicate their poor self esteem which is characteristic of depressed children.

Table 5.8 The Sections and Sub-sections of the Questionnaire

CDI Total		Mean	N	Std. Deviation	Minimum	Maximum
Non depressed	Ques subscale A	3.16	61	1.186	1	5
	Ques subscale B	2.79	61	1.226	0	5
	Ques subscale C	2.30	61	.955	1	5
	Ques subscale D	1.62	61	1.186	0	4
	Ques subscale E	1.89	61	1.240	0	5
	Ques subscale F	.72	61	1.067	0	4
	Ques subscale G	1.02	61	1.057	0	4
	Ques subscale H	1.54	61	1.246	0	4
Depressed	Ques subscale A	4.00	7	.577	3	5
	Ques subscale B	3.57	7	.976	2	5
	Ques subscale C	2.71	7	1.113	1	4
	Ques subscale D	2.29	7	1.113	1	4
	Ques subscale E	3.00	7	1.000	2	4
	Ques subscale F	1.29	7	1.113	0	3
	Ques subscale G	1.14	7	.900	0	2
	Ques subscale H	1.86	7	1.215	0	3
Total	Ques subscale A	3.25	68	1.164	1	5
	Ques subscale B	2.87	68	1.221	0	5
	Ques subscale C	2.34	68	.971	1	5
	Ques subscale D	1.69	68	1.188	0	4
	Ques subscale E	2.00	68	1.258	0	5
	Ques subscale F	.78	68	1.077	0	4
	Ques subscale G	1.03	68	1.036	0	4
	Ques subscale H	1.57	68	1.238	0	4

Subsection A (Relationship with Parents) – Considering that the maximum in this sub section is 5, it seems that both the depressed and non depressed group have difficulties with this aspect as their mean scores are high (4.00 and 3.16 respectively).

Subsection B – (Relationship with Siblings) – The mean scores of both the depressed group (3.57) and the non depressed group (2.79) are above average, indicating difficulties with this relationship.

Subsection C – (Self Perception at Home) – The maximum score in this aspect is 5 , and the mean score for the depressed group (2.71) and the mean score for the non depressed group (2.30) show that this aspect can be of concern to both groups.

Subsection D (Living Conditions) – This aspect did not seem to concern the non depressed group too much ($x = 1.62$), but the depressed group mean (2.29) may indicate that they seemed to be dissatisfied with their living conditions.

Subsection E (Relationship with Teacher) – The depressed group’s mean (3.00) showed that this relationship might have presented with some difficulties

Table 5.9 Correlation between CDI total and Questionnaire total

		Total score on Questionnaire	Total CDI score
Total score on Questionnaire	Pearson Correlation	1	.508**
	Sig. (2-tailed)	.	.000
	N	68	68
Total CDI score	Pearson Correlation	.508**	1
	Sig. (2-tailed)	.000	.
	N	68	68

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

From the above table it is evident that there is a positive, significant relationship between the total score on the CDI and the total score on the Questionnaire. This could indicate that the scores on the Questionnaire could be valid when compared to the scores on the CDI.

Table 5.10 Home section and school section statistics

Questionnaire Total		N	Mean	Std. Deviation
Total Home scale score	Non depressed	23	7.70	2.032
	Depressed	45	11.40	2.416
Total School scale score	Non depressed	23	2.00	1.567
	Depressed	45	7.09	2.429

Results indicate that the mean score on the home section for the Depressed sample (11.40) was much higher than the mean score on the school section (7.09). Thus for the Depressed sample it seems that depression most likely originates from the home as opposed to the school. On further examination of the data, it is evident that the same situation applies to the non depressed sample, where the mean for the home section (7.70) is much higher than the mean for the school section (2.00).

Table 5.11 Correlation between CDI total and Home and School Section of the Questionnaire – Non Depressed

		Total CDI score	Total Home scale score	Total School scale score
Total CDI score	Pearson Correlation	1	.414**	.425**
	Sig. (2-tailed)	.	.001	.001
	N	61	61	61
Total Home scale score	Pearson Correlation	.414**	1	.434**
	Sig. (2-tailed)	.001	.	.000
	N	61	61	61
Total School scale score	Pearson Correlation	.425**	.434**	1
	Sig. (2-tailed)	.001	.000	.
	N	61	61	61

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

a. CDI Total = Non depressed

Using the total CDI score, a correlation was drawn between a) total home section score from the Questionnaire; and b) the total school section score from the Questionnaire for the non depressed sample.

The above table shows that there is a significant and positive correlation between the total score on the CDI and the total home scale score and school scale score for the non depressed sample of the Questionnaire.

Table 5.12 Correlation between the CDI total and the Home and the School section of the Questionnaire - Depressed

			Total CDI score	Total Home scale score	Total School scale score
Spearman's rho	Total CDI score	Correlation Coefficient	1.000	.216	-.187
		Sig. (2-tailed)	.	.641	.688
		N	7	7	7
	Total Home scale score	Correlation Coefficient	.216	1.000	.651
		Sig. (2-tailed)	.641	.	.113
		N	7	7	7
	Total School scale score	Correlation Coefficient	-.187	.651	1.000
		Sig. (2-tailed)	.688	.113	.
		N	7	7	7

a. CDI Total = Depressed

Using the total CDI total score, a correlation was drawn between a) total home section score from the Questionnaire; and b) the total school section score from the Questionnaire for the depressed sample.

The above table shows that there is no correlation between the total score on the CDI and the total home section score and school section score for the depressed sample of the Questionnaire.

Overall it seems that there are more factors at home than at school that are likely to cause depression.

5.5 Conclusion

The results of the Children's Depression Inventory (CDI) showed that a relatively high percentage of respondents were depressed. The results of the Questionnaire show that the respondents found difficulties with their relationships with their parents, siblings and teachers.

CHAPTER SIX

DISCUSSION OF FINDINGS

6.1. Introduction

This chapter discusses the results presented in chapter five. It focuses on some of the more important findings of this study in relation to relevant research , and present the conclusions that were drawn.

The initial subject pool included 78 grade 6 pupils from a public school in Reservoir Hills, a suburb ofDurban in the province of Kwa-Zulu Natal. Participation was on a voluntary basis and required parental consent. All pupils returned affirmative parental consent forms, signed consent forms themselves, and chose to participate when asked in the classroom. Of the 78 respondents, 10 failed to complete either the CDI or Questionnaire because of absence, therefore their data was unusable in the subsequent analyses. Thus the total number of respondents ultimately employed in this study was 68, 40 females and 28 males. The age range of respondents was 11 to 13 years.

It will be recalled that the general purpose of this study was to investigate the prevalence of depression in primary school preadolescent (prepubescent) children. The specific purpose was to determine whether the depression originated more from the home or school factors.

The purposes of this study therefore are :

1. To examine if there are differences between depressed and non depressed respondents on the CDI in respect of the variables of race, gender, age, area living in, and adults living with.
2. To establish if the means of the scores of the depressed sample are higher on the sub-sections of the home section or sub-sections of the school section of the Questionnaire.
3. to establish if there is a relationship between the total CDI score and the total Questionnaire score.

6.2. Discussion of Findings

6.2.1 Socio-demographic Factors

6.2.1.1 Prevalence

Attempts to estimate the prevalence of childhood depression are compromised by classification differences that fail to distinguish between the symptoms and the disorders themselves, the wide variation in assessment methods (for example, self-reports, structured or semi-structured interviews, inventories, questionnaires, and epidemiological surveys), and clinic versus community samples. Different sources and methods produce very different estimates of the severity, duration, and frequency of depression (Hammen & Rudolph,

1996) in Gilbert (1997). Thus, pending findings from large epidemiological studies of childhood depression, caution is warranted in discussing the precise extent and seriousness of this disorder in childhood. It is clear, however, that many children experience depression.

The present study used an inventory (CDI) and a Questionnaire to investigate the prevalence of depression and factors from home and school that may contribute to depression. The rationale for using self report instruments and not teacher, peer or parent rating scales in this study was that observer rating scales are dependent upon information perceived by the observer and are influenced by his bias (Aitken, & Zeealey, 1970) in Birleson (1981). Self-rating scales seem preferable, but the question is : are children able to answer honestly and reliably ?

According to Piaget (1954) in Birleson (1981), the cognitive developmental stage of children over the age of 7 years is such that they should be capable of making descriptions and judgements about their feelings and behaviour . However, it is not certain that they will describe it in exactly the same terms as adults.

A longitudinal and multidisciplinary study investigating the prevalence of depression in a representative sample of 641 9-year-old New Zealand children by Kashani, McGee,Clarkson, Anderson, Walton, William, Silva, Robins, Cytryn & McKnew (1983) in Cytryn, Gershon & McKnew (1984), reflected that the current prevalence of minor and major depression was estimated as 1.7 % and 3.6 %, respectively. Hammen and Rudolph (1996) in Gilbert 9 1997) reviewed eight epidemiological surveys of depression in children between 1987 and 1993. They found overall rates of depression to be between 6 % and 8 %.

In the present study it was perturbing to find prevalence rates higher than the above mentioned research findings. According to the CDI, the prevalence of depression was 10.3 %. One of the reasons for this relatively high rate could be attributed to Edelson et al's (1992) finding that the outcome of a single administration of self-report depression measures needs to be interpreted with caution. There is a tendency for children and adolescents to score higher on the first administration of self-report depression questionnaires than on a second testing conducted a short time after the initial assessment (Edelson, et al., 1992; Reynolds, 1987; Reynolds & Graves, 1989 in Cole, Martin, Powers and Truglio (1996). The general inference is that the first testing represents an overendorsement of depressive symptoms. This result is also found in the use of depression measures with adults and is not unexpected, given that depression as a clinical psychopathology is not a stable trait.

However, the results of the present study also show similar rates of depression to previous studies with similar populations (Fleming, Offord, & Boyle, 1989) in Speier, Sherak, Hirsch and Cantwell (1995), when the results of the CDI are analyzed. But, the results on the Questionnaire present quite an alarming scenario if the results can be assumed to be valid. Although the Questionnaire was developed especially for this study but not to investigate prevalence per se, it correlated positively and significantly with the CDI .Therefore the researcher is of the opinion that the findings from the Questionnaire should not be disregarded completely. The CDI is a popular, reliable, and well validated self-report measure of depressed symptoms. Table 5.10 in chapter 5 shows the positive and significant correlation between the two instruments.

Another possible reason that the researcher feels could explain the discrepancy between the scores on the two instruments was the following. The CDI was completed by the respondents

with no input from the researcher besides instructions from the researcher and physical presence of the researcher. The statements of the Questionnaire, however, were read to the respondents. It is a possibility that many of the respondents had difficulty in reading and therefore completed the CDI for the sake of it. Therefore when the statements on the Questionnaire were read to them, the statements were understood and their responses were a little more valid.

6.2.1.2 Age and Pubertal Status

Prevalence appears to vary with age over the course of childhood. For example, using DSM 111 criteria, evidence suggests that young children (aged 1 – 6 years) referred for treatment may have markedly lower rates (1%) of major depression than children aged 9 – 12 years (13 %) (Kashani, Cantwell, Shekim & Reid, 1982; Kashani, Ray & Carlson, 1984) in Klerman & Weissman (1989).

In a study by Saylor & Edwards (1984) in Saylor & Edwards (1985) the data confirm the speculation of previous researchers who suggested that self-reports of depressive symptoms on the CDI may vary as a function of age and sex. However, these differences are probably not of sufficient magnitude to warrant the use of separate norms for sex and grade.

Prevalence rates vary significantly as a function of pubertal status. For example, in the Isle of Wight study (Rutter, Tizard, & Whitmore, 1970) in Harrington (1993), 13 % of 10-11-year old children from the general population showed depressed mood. The same children were reassessed at age 14-15 years. Over 40 % of the adolescents reported feelings of misery and depression. Thus clear differences in depression as a symptom are evident in late childhood and early adolescence. In data obtained from the Maudsley Hospital (U.K.), approximately

11 % of prepubertal cases showed depressive symptoms; while about 25 % of postpubertal children did so (Rutter, 1986).

In the present study, the data seem to indicate a trend for depressive symptoms to increase with age in both males and females. The findings of this study follow the trend of some studies which show that the rate of depression is not significant in the prepubertal stage and increases as children enter puberty. According to Piaget, children are entering the formal operations stage when they are 11 – 13 years old and are therefore able to describe and understand their feelings better.

Table 5.2 in chapter 5 shows the increasing level of depression with age. There were no depressed 11 –year-old males or females in the sample. The number of depressed boys and girls in the 12-year –old and 13-year-old age categories certainly reflect the findings of studies such as the Isle of Wight (1970) in Harrington (1993). The depressed group consisted of : 7.1 % of 12-year boys and 7.1 % of 13-year boys as well as 5.0. % 12-year girls and 2.5 % of 13 year girls. The present study therefore lends support to the inference that depression begins in adolescence.

An interesting observation in the present study was that of the males : 39.3 % were 11-year-old; 32.1 % were 12-year-old; and 28.6 % were 13-year-old and of the females : 50 % were 11-year-old; 42.5 % were 12-year-old and 7.5 % were 13-year-old. Despite the fact that a substantial portion of the sample was in the 11-year-old category, the study found that 0 % of the respondents were depressed, again lending support to the origins of depression in adolescence.

A variety of quite different types of explanations could be proffered if further research confirms the reality of age differences. Perhaps, to a large extent major depressive disorders are genetically determined and perhaps the genes do not usually “ switch on” until late childhood or adolescence. Or perhaps sex hormones play a role in the vulnerability to depression in that the increase of sex hormones at puberty increases susceptibility to depression. It could be argued that depression rises in frequency during adolescence because family supports and other protective factors become less operative or less available at that time. It could also be that experiences during later childhood and adolescence increase the likelihood of a set of learned helplessness (Dweck, Davidson, Nelson, & Enna, 1985) in Rutter (1986).

6.2.1.3 Gender

Male and female children can be socialized quite differently around the management of emotion particularly the management of pain which girls may be encouraged to acknowledge and express and boys may be encouraged to deny and suppress (the reverse is often the case around anger, with boys allowed its expression and girls often not). Taught that it is womanly to be sensitive and vulnerable, a girl may directly show she is depressed. Taught that it is manly to be tough and act aggressive when hurt, a boy may only indirectly show he is depressed. Because boys feel pressured to mask their genuine pain... recognizing sadness and depression in boys tends to be more difficult (Miller, 1998).

It is well-documented that depression occurs more frequently in adult women than adult men. Numerous factors have been proposed to explain this phenomenon (Nolen- Hoeksema, 1995) in Chen, Rubin, Li (1995). Among children, however, gender differences in depression rates have been a subject of controversy. For example, Kashani, Carlson, Horwitz,

and Reid (1985) in Rutter (1986) found that in a sample of 9-year-old children, there was no gender difference in depression symptoms.

Typically, research has found no sex differences in the prevalence of depressive disorders in clinic and non-clinic samples of children (aged 6 – 12 years) (e.g., Kashani et al., 1983 Lefkowitz & Tesiny, 1985; Lobovits & Handal, 1985) in Rutter (1986). However, some researchers (e.g., Nolen-Hoeksema, Girgus, & Seligman, 1992) in Chen, Rubin, Li (1995) have found that the average level of depression in boys was greater than in girls.

An interesting finding of Stark (1990) and one that is found quite consistently, is that it appears as though in prepubescent depressed children the number of boys is similar to the number of girls. In general, most empirical data suggest that in prepubescent children, boys are equally or slightly more likely to report depression than girls. This gender difference reverses at some point during adolescence, with girls becoming much more likely to report depression than boys. Among adolescents, the prevalence is greater in females than males (Mezzich & Mezzich, 1979; Reynolds, 1985) in Kazdin (1990). Differences in severity of depression between males and females appear to begin in early adolescence and to increase over the next several years (Kandel & Davies, 1982) in Boivin, Poulin, Vitaro (1994). Many find that gender differences in depression are consistently detectable starting at age 15 (Kandel, & Davies, 1986; Kashani et al., 1987) in Boivin, Poulin, Vitaro (1994). .

This is quite unlike the depressed adult population, where the number of depressed females is reported to be twice as great as the number of depressed males. Thus the research would suggest that this gender difference appears during adolescence.

The data of the present study indicate that according to the CDI , 5.9 % of the males are depressed , while 4.4 % of females are depressed. These indications support the findings of previous studies (Anderson et al., 1987) that slightly more males than females are depressed. The interesting fact is that there were more females than males in the sample (28 boys and 40 girls). It would be expected that given this fact that slightly more females than males would be depressed. Also earlier it was stated that girls more readily express their sadness, while boys are covertly taught not to show their emotions. Despite all these factors, the data reflect that slightly more boys than girls were depressed, lending support to findings of previous research (Anderson, 1987; Stark, 1990).

6.2.1.4 Race

The study of depression among youths of colour is much neglected by researchers, and there is considerable controversy about the impact of language, cultural values , and norms on diagnostic methods and findings. In one epidemiological study, Roberts and Chen (1995) found that Mexican American middle school students reported significantly more depression than their white counterparts. Mexican American females experienced the highest rate of depressive symptoms.

Too few studies have examined childhood depression among African American children, and the results to date are equivocal. Sampling 550 suburban middle school children, researchers found higher rates of depression among African American children in grade 7; later sampling the same students in grade 9, they reported that only the African American females showed a greater prevalence over white students (Garrison, Jackson, Marsteller, McKeown, & Addy, 1990) in Gilbert (1997).

No difference in prevalence rates of depression between African American and white participants was found in a clinical sample of 300 children ages 7 to 11 (Costello et al., 1988) in Gilbert (1997).

The tabled data in this study show that 57.4 % of the sample were African, 4.4 % Coloureds, and 38.2 % were Indians. The African respondents showed higher rates of depression on both the CDI and Questionnaire, than the Coloured and Indian respondents. Of the 10.3 % that were depressed, the rate of depression according to race was therefore: 5.9 % African; 2.9 % Coloured and 1.5 % Indian. Many factors, which would be interwoven with the present and past political situation in South Africa, could explain the higher rates of depression among the African respondents. Historically the African population were the most disadvantaged during the apartheid regime.

6.2.1.5 Geographical Area Living In

Fifty percent of the sample live in the predominant African areas, 45.6 % live in predominant Indian areas and 4.4 % live in other areas. It must be noted that some of the respondents have moved from the African areas to live near the school which is in an Indian area. It is not known if any of these respondents are part of the depressed sample. The depressed sample (10.3 %) consisted of 7.4 % from African areas; 1.5 % from Indian areas; and 1.5 % from other areas.

A higher percentage (though not significant) of depressed respondents live in the predominantly African townships. Generally these areas are poorly developed, lack

recreational facilities and the homes are of a sub economic standard. It can therefore be assumed that living conditions are not ideal. According to anecdotal evidence, it is an accepted fact that children of all race groups in South Africa watch more television than is good for them. It is possible that when children compare what they see on television to what they actually have at home, feelings of sadness, anger and frustration are not uncommon.

6.2.1.6 Adult Living With

Fifty nine percent of the sample live with both their parents, 32 % live with only their mum, and 8,8 % live with grandparents or guardians. The depressed sample (10.3 %) comprised of 4.4 % who live with both parents ; 4.4 % who live with only their mum; and 1.5 % who live with grandparents or guardians. An interesting observation in the data was that more of the depressed group lived with both their parents as compared to those did not live with their parents. It would be expected that respondents living with one parent or with guardians would have more reason to have higher scores on depression.

Once again the researcher would like to use the television to explain this situation. Anecdotal evidence suggests that children believe a huge portion of what they view on television. It is not uncommon for them to compare their lives with those of the television characters. Most television programmes show happy, well dressed, “ in control” parents who indulge their children and never put a foot wrong. It is not surprising therefore, that many children let alone the depressed group find that their parents do not measure up to the ideal parent shown on television.

6.2.2 Home Factors

A growing body of research suggests that some family interactions increase the risk for the maintenance, if not development, of childhood depression. Various studies suggest that the emotional climate in families with depressed children is less cohesive, less emotionally expressive, more hostile, more critical, less accepting, more conflictual and more disorganized than in families without depressed members (DuRant, Cadenhead, Pendergrast, Slavens, & Linder, 1994; Hammen & Rudolph, 1996) in Gilbert (1997).

Social interaction in the family may also play a potentially significant role in the development of childhood depression. Research has suggested that parental resentment and rejection of the child, lack of affection, uninvolved, and emotional detachment occur early in family life and contribute to subsequent depression (Crook, Raskin, & Eliot, 1981; Lefkowitz & Tesiny, 1984; Weissman, Paykel & Klerman, 1972) in Messer & Gross (1995).

The greatest level of overt conflict in the family was reported by depressed children. It appears as though there is enough relevant research (Forehand et al., 1988; Puig-Antich et al., 1985) that implicates family conflict as being a psychologically destructive force. From existing research it is not possible to determine the source of the family conflict. It is not clear whether the conflict is between the parents, the parents and the child, the child and a sibling, a sibling and the parents, or some other combination of combatants. Nevertheless, conflict in the family, regardless of its source and direction, could leave a child feeling angry, insecure, guilty, and possibly afraid to express himself for fear of provoking a conflict.

But although these findings are intriguing, much research is needed to differentiate the family conditions that cause depression in children from those that may result from depression in children.

6.2.2.1 Relationship with Parents

Overall the previous research findings indicate that defective family relationships could be an important contributor to a child's depression. Amongst the family factors that seem to protect children from psychiatric disorders, a good relationship with parents seems important (Rutter, 1971). Armsden & Grennberg,(1987) in Messer & Gross (1995), have shown in their research that the level of depressive tendencies in preadolescents is significantly associated with problems in parent-child interactions.

The hypothesis that positive relationships between parents, as well as between parents and children, may have a protective effect with respect to anxiety, as opposed to family disharmony leading to depression in children, should ideally be tested in a longitudinal study.

The findings of this study support the inference that a poor relationship with parents could contribute to depression. Table 5.8 in chapter five shows that the depressed group's mean on the relationship with parents subsection (4.00) is higher than the non depressed group's mean (3.16). The table also shows that the mean of the non depressed group is also quite high. This indicates that children value their parents and when this relationship is not

nurturing it can be a cause for unhappiness. Sample statements from the relationship with parents scale are : My parents are very strict. I wish my parents would spend more time with me.

The scale B on the CDI (Interpersonal relationships) reflects the following means : depressed group (3.43) and non depressed group (.87). The maximum score for this scale was 8. This indicates like previous research studies, that the depressed children in this sample had unsatisfactory relationships with their parents. Whether the depression influenced the unsatisfactory relationship or the unsatisfactory relationships caused the depression could not be decided on in the present study.

The relatively high means for the scales on interpersonal relationships on the CDI and for the relationship with parents on the Questionnaire indicate that relationship issues seem to be the most important factor contributing to children's depression.

Many of the respondents indicated that they found that their parents were too strict, wanted more quality time with their parents and worried about what would happen if their mum would become ill.

In conclusion, it should be noted that a depressive episode in a child may act as a superimposed agent producing or exacerbating deficits and distortions in the family relationships especially the mother-child relationship. These deficits and distortions are probably reversible. The affective state of the depressed child may be the central contributor to many of the psychological difficulties in which he or she is involved .

6.2.2.2 Relationship with Siblings

According to Stark (1990), numerous theories of childhood psychopathology emphasize the role of the family relationships in the development and maintenance of psychological disorders. Given the central role of the family in these theories, it would seem logical that there would be a good deal of relevant research. Unfortunately this is not the case. There is in fact a minimum of family-related research and even less that include the role of conflict with siblings as a contributory factor.

Seligman and Peterson (1986) proposed that depression in children generally resulted from characteristics of an individual in conjunction with characteristics of the environment. Neither individual characteristics nor the uncontrollable events alone result in widespread helplessness and depression; only their co-occurrence leads to depression.

The mean scores on this sub-section of the Questionnaire for both the depressed and non depressed groups are high enough to warrant some attention. The mean scores are as follows : depressed : 3.57 and non depressed :2.79 . The maximum score is 5. Sample statements from this sub-section are : My brothers and sisters irritate me all the time; my brothers and sisters get me into trouble. Some of these feelings could be put down to plain and simple sibling rivalry. In most instances sibling rivalry is considered normal, unless one or both parents are biased in their interactions with their children. Many of the respondents both depressed and non depressed found that they argued a lot with their siblings, expressed a desire to be able to play with their siblings, and wanted to be kinder to them. However, as stated earlier, more conclusive evidence is required to validate these findings.

6.2.2.3 Self perception at Home

Although the depressed group's mean (2.71) is higher than the non depressed group's mean (2.30), the data of this sub-section did not have the same impact as the relationship with parents and siblings did. Sample statements from this aspect are : At home , nobody listens to me; I must improve my behaviour at home. Many respondents both from the depressed and non depressed groups answered in the affirmative for the statement : I worry about disappointing my parents. This could again indicate the value children place on the love and acceptance they receive from their parents.

6.2.2.4 Living Conditions

Sample statements from this sub-section are : There are too many people living in my house; I don't have a proper place to do my homework. Although 73.5 % of the sample indicated that they shared their bedroom with others, only 1.5 % of them were angry about this fact. A substantial portion (61.8 %) indicated that they did not mind sharing their bedroom. (Refer Appendix 7). A small proportion of the sample complained about the noise in their homes, or the facilities at home or even the cleanliness at home.

(Appendix 7)

6.2.3 School Related Factors

6.2.3.1 Relationship with teacher

Researchers generally find that interpersonal problems with teachers and peers are developmental risks for depression (Hammen & Rudolph, 1996) in Gilbert (1997). But ,

because many of the studies are cross-sectional, it is unclear whether interpersonal difficulties lead to depression or vice versa.

Puig-Antich et al (1985) in Benfield, Palmer, Pfefferbaum, Stowe (1988) compared the psychological functioning of children with major depressive disorder, children with non depressive psychiatric disorder, and children with no psychiatric diagnosis. He found impairments in academic performance, teacher-child relationship, and peer relationships for both major depressive and other psychiatric disorders, with the impairment being worse for children with major depressive disorders.

A multitrait-multimethod longitudinal study of causal relations between academic and social competence and depression in 1996 by Cole, Martin, Powers & Truglio reported the following results : the suggestion that children's fundamental level of social or academic competence deteriorates because of depression was not supported by the data. However, the researchers assert that the children's underlying level of social and academic competence is not affected by depression over a 6-month interval.

The data of the present this study support the inference that if a child's relationship with his / her teacher is not a healthy one, then this issue could be one of the factors contributing to depression. The teacher plays the role of parent at school and any difficulties with this relationship necessitates enquiry into the behaviour of both teacher and child. Some of the statements from this sub-section are : My teacher gets angry at me for no reason; I cover my work when my teacher walks by.

The mean of the depressed group on the relationship with teacher sub-section (3.00) indicates cause for concern. Children should love going to school, where they would be in the company of an adult role model (teacher), whom they should love and respect, not to forget the love and respect they should get back. However, if this relationship is fraught with difficulties, then attempts must be made to remedy the situation. In this study it seems as if the children rate their teachers as being too strict, are quite nervous in their teacher's presence, feel they are unfairly treated by their teachers and many indicated that they enjoyed having their teachers being absent from school.

6.2.3.2 Relationship with Peers

Research on children's peer relationship difficulties has centred on the behavioural, social-cognitive, and self-perception correlates of peer rejection (Asher & Coie, 1990) in Bouvin, Poulin, Vitaro (1994). This interest has been prompted by longitudinal studies indicating that children with problematic peer relationships are at risk for future externalizing and internalizing problems. More specifically, the available empirical evidence suggests that peer relationship difficulties in middle childhood are predictive of schizophrenia, general mental health problems, delinquency and criminal behaviour, and school-related problems (Kupersmidt, Coie, & Dodge, 1990; Parker & Asher, 1987) in Bouvin, Poulin, Vitaro (1994

Research has also demonstrated that peers rate depressed children as less popular (Lewinsohn & Hoberman, 1982; Youngren & Lewinsohn, 1980) in Chen, Rubin, Li

(1995). It has also been demonstrated that children who have difficulties in peer relationships are likely to be depressed (Cole & Carpentieri, 1990; Lahey & Strauss, 1983) in Chen, Rubin, Li (1995).

The results of a study conducted in The People's Republic of China in 1995 by Chen, Rubin & Li , found that peer acceptance and rejection and academic achievement were significantly correlated with depression. Social difficulties in school including low self-esteem were associated with and predicted depression. Academic difficulties were associated with depression only for children from families in which the mother was rejecting and parental relationship was highly conflictual.

In a study of the factors contributing to depression, entitled “ The Newcastle childhood Depression Project “ Berney, Bhate, Kolvin, Famuyiwa, Barrett, Fundudis& Tyrer (1991), found a substantial proportion of the non-depressed group (30-38 %) had problems with their peers at school. But they also found an even greater proportion of the depressed group (44 – 50 %) had peer problems.

Children can experience feelings of distress due to a lack of peer support. The impact of negative peer experiences on the child should never be underestimated. Kandel (1982) in Bouvin, Poulin, Vitaro (1994) reported that both peer and parent variables are specifically related to children's self-reported depression. Patterson and Capaldi (1990) in Bouvin, Poulin, Vitaro (1994) suggested that stressful life events, a lack of social skills, low self-esteem, and antisocial behaviour could influence depression among preadolescent children, but through the mediation of peer rejection.

The analysis of the data in the present study reflects that relationships with peers were intact and positive. This was not surprising as the depressed sample's mean score was 1.29. While informally speaking to the respondents the researcher was able to establish that although the respondents had their petty arguments with peers there was no real animosity and grudges or unhappiness evident. This fact was confirmed by the teachers who indicated that they ensured that no child was isolated, teased or victimized. Some sample statements from this subsection are : My classmates don't like me ; Other children are always fighting with me.

The means of both the depressed and non depressed groups on the relationship with peers subscale although different, were not significant. In fact 91.2 % of respondents scored 2 and below on this subsection.

6.2.3.3 Self Perception / Self Esteem / Self-Efficacy

The beliefs we hold about ourselves have a significant impact on what we are able to accomplish and how we feel about ourselves.

Cognitive models of depression, notably those of Beck, emphasize three aspects of cognitive functioning: negative perceptions of the world, oneself and the future. These negative perceptions constitute the “ negative cognitive triad” , a distorted style of thinking that appears to be highly correlated with depression (Beck, Shaw, &Emery, 1979; Beck, 1995) in Gilbert (1995).

Overall, the findings from research studies demonstrate that low perceived social and academic self-efficacy contribute to depression both directly and through their effects on

academic achievement, prosocial behaviour and problem behaviours. It is clear that poor self-esteem can contribute to depression in children. Further, both perceived academic self-efficacy and perceived social self-efficacy appear to be important issues with respect to the development of childhood depression.

Researchers (Kendall, Stark, & Adam, 1990) in Kaslow, Brown, Mee (1994) indicate that depressed children negatively evaluate their performances, abilities, and other meaningful personal qualities. It appears as though negative self-evaluations are one of the most common symptoms of depression. Stark (1990) found that 91 % of the depressed sample reported the symptom. However, it is important to note that negative self-evaluations and low self esteem are not specific to depression. Rather they appear to be associated with many psychological disorders. The debilitating nature of negative self-evaluations should not be underestimated. Robbins and Alessi (1985) in Stark (1990) reported that the symptom was significantly associated with suicidal behaviour.

However, the findings of the present study are a little different. Some sample statements from this sub-section are : I am the last to get picked for a game; I would rather work alone than in a group. The mean score for the depressed group (1.14) and the non depressed group (1.02) are both not significant . It was not easy to speculate on the findings in this sub-section. Either the respondents were all happy, well adjusted individuals with normal or high opinions of themselves and their abilities or the statements were misinterpreted by them.

However, analysis of the scale C (Ineffectiveness) on the CDI reflects that the depressed group's mean was 4.57 (Max. 8). These findings lend support to the studies by Kendall, Stark & Adam, 1990 in Kaslow, Brown, Mee (1994). These researchers found that the

depressed group had higher scores on social and academic ineffectiveness. An example from this scale : (the respondents had to tick one of these three options) : My schoolwork is alright; My schoolwork is not as good as before; I do very badly in subjects I used to be good in.

Analysis of scale E (Negative Self-Esteem) on the CDI reflects that the depressed group's mean is 4.14 (Max. 10) the results from this scale also lend support to research studies like Beck (1995) in Gilbert (1997) which purport that children with low or negative self-esteem show many signs and symptoms of depression.

6.2.3.4 Academic Functioning / Performance

A number of symptoms of depression are likely to have an adverse effect on the academic performance of a child. Specifically, anhedonia, negative self-evaluations, difficulty concentrating, indecisiveness, fatigue, and psychomotor agitation could lead to a failure to perform academic tasks at a level commensurate with one's ability and pre depression level. Some of the symptoms affect the child's motivation, whereas others affect the efficiency of the child's cognitive processing.

Evidence indicates that depressed children exhibit problems in school performance (Hollon, 1970; Stark, Livingston, et al., 1990) in Stark (1990). Brumback et al., (1977), in Kazdin (1990) investigated the relationship between depression and school performance among referred children. Fifty eight percent of the children were depressed. Of the depressed children, 71 % evidenced a change in school performance, and 62 % reported a change in attitude toward school that coincided with the occurrence of the depressive episode. In addition 41 % experienced school refusal during the depressive episode.

Deficits in social and academic competence have been implicated both as causes and as consequences of depression in children. But, as with other school-related problems, whether these difficulties are antecedents, concomitants, or consequences of depression is still unclear.

The results of this sub-section of the Questionnaire reflect that the respondents generally perceive themselves as academically competent and appear to be satisfied with their progress in schoolwork.

Analysis of the data from the Questionnaire show that the mean of the depressed group (1.86) and the mean of the non depressed (1.54) reflect that the respondents (both depressed and non depressed) did not find difficulties with their academic progress. Some sample statements from this sub-section are : My classmates understand schoolwork better than I do; I am not happy with my progress in schoolwork.

With reference to the CDI, although there was no separate scale on academic performance, the results of the scale on ineffectiveness (Scale C) show a different picture. As already stated in a previous discussion (6.2.2.3), the results show that the depressed group perceived themselves as socially and academically incompetent. These data link up with a study by Carlson & Cantwell (1983) who reported that 48 % of their depressed sample of children were experiencing academic difficulties. These children often appear unmotivated to learn. This is not surprising given that their cognitive thinking includes ideas such as : “ I’ll never be able to do that.” ; “ I’m not as smart as other kids” ; “ It just doesn’t matter.”

Difficulties with academic performance often plague children with depression. Regarding academic deficits, one might speculate that the motivational, cognitive, and attentional problems, so often symptomatic of depression, lead to diminished school performance, lower grades, poorer teacher evaluations than non depressed students Academic performance and grades are negatively affected by childhood depression, but findings suggest that these declines are secondary to anhedonia and difficulties with concentration, not the result of intellectual impairment (Kovacs & Goldston, 1991 in Gilbert (1997)

According to Kovacs & Goldston (1991) in Gilbert (1997), depression and depressive symptoms interfere with school performance, academic achievement and age-appropriate social behaviours.

6.3. The CDI and the Questionnaire

The scales of the CDI and some sample statements that would get the highest score from each scale are :

A – Negative Mood - I am sad all the time

I am sure that terrible things will happen to me

B – Interpersonal - I do not want to be with people at all

Problems I get into fights all the time

C – Ineffectiveness - I can never be as good as other kids

I am bad all the time

D – Anhedonia - Most days I do not feel like eating
 Nothing is fun at all

E – Negative - Nothing will ever work out for me
Self Esteem Nobody really loves me

An unusual observation from the analysis of the comparison of means of the depressed and non depressed groups was that the rating from highest mean to lowest mean on the scales was exactly the same for both groups. The order of the highest mean to the lowest mean for both groups was as follows : Anhedonia, Negative Mood, Ineffectiveness, Negative Self Esteem, Interpersonal Problems.

The scales of the Questionnaire and one sample statement from each is as follows :

A - Relationship

With Parents - I wish my parents would spend more time with me

B - Relationship

With Siblings - I would like to be kinder to my brothers and sisters

C – Self-Perception

At Home - At home nobody listens to me

D – Living

Conditions - I wish we had a better home

E – Relationship

With Teacher - My teacher gets angry at me for no reason

F – Relationship

With Peers - My classmates make fun of me all the time

G – Self-Perception

At school - I am the last to get picked for a game

H – Self-Perception

Achievement - I am not happy with my progress at school

The order of the highest mean to lowest mean for the depressed and non depressed groups on the scales of the Questionnaire differ only slightly. The order from highest to lowest means for the depressed group is as follows: Relationship with parents, Relationship with siblings, Self-Esteem at home, Relationship with teacher, Self-Perception – Achievement, Living Conditions, Self-Perception at School, Relationship with peers.

The order of the highest to lowest means for the non depressed group is as follows : Relationship with siblings, Relationship with Parents, Self-Esteem at home, Relationship

with Teacher, Living Conditions, Self-Perception at school, Self-Perception- Achievement, Relationship with peers.

While on the Questionnaire, the sub section on relationship with parents and siblings was on the top of the list for both depressed and non depressed groups, on the CDI the scale on interpersonal problems was last on the list. It is possible that this was so because on the CDI there were only 4 statements and each referred generally to people, while the relationship statements on the Questionnaire were quite specific and there were 5 statements for each of the sub-sections.

6.2.5 General

At the end of the Questionnaire, two open ended questions were added to allow the respondents to comment on the environmental conditions at home and at school . The following themes emerged from these two questions (Appendix 7).

Home environment

Noise – 26.5 % of the respondents indicated that this was a problem.

Facilities – 7.4 % of respondents found that facilities were inadequate

Cleanliness – 22.1 % of respondents complained about this.

School environment

Noise – 10.3 % of respondents complained about the noise at school

Facilities – 32.4 % of respondents felt that the facilities at school were inadequate

Cleanliness – 60.3 % of respondents indicated that this was a problem.

6.4 Conclusion

The results of the CDI and Questionnaire have revealed possible problem areas in the lives of these primary school children. Although 10.3 % (CDI estimate) were identified as depressed, the researcher is of the opinion that a few more respondents would be identified if a multiple-gate assessment is conducted.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

This chapter first focuses on the summary of the findings of other relevant studies in childhood depression, then continues by noting the important findings of the present study, discusses the limitations and strengths of the present study, and finally offers some recommendations to the relevant authorities and parents.

The main purpose of this study was to determine the prevalence of depression among preadolescent primary school children. The specific purposes of this study were to establish whether factors from home or school were contributory factors to depression. The critical questions that assisted in clarifying the purpose of the study therefore were :

1. How prevalent is depression among preadolescent primary school children ?
2. What are the factors at home that may contribute to depression ?
3. What are the factors at school that may contribute to depression ?

7.2. Discussion

7.2.1 Findings in respect of Present Study

The findings of the present study reflect, contradict and support many of the previously discussed studies on childhood depression. The study's general purpose was to determine the prevalence of depression in primary school prepubescent children and the specific purpose was to determine which factors at home and school contributed to most of the depressive symptoms. In order to answer the general purpose the Children's Depression Inventory (CDI) was used and to answer the specific purpose a specially developed Questionnaire was administered.

It was found that 10.3 % of the sample was depressed according to the CDI norms. This represents a high percentage when compared to studies with similar populations. One of the reasons for this relatively high rate could be attributed to the inference that there is an over-endorsement of symptoms on the first administration of a test to children and adolescents. However, the present study shows a similar rate of depression to some other studies (Fleming, Offord and Boyle, 1989) in Gilbert (1997). The prevalence rate in this study refers to the current rate and not the lifetime rate.

With respect to the age and pubertal status, the study showed that there was a trend for depressive symptoms to increase with age in both males and females. This trend was in keeping with previous studies (Isle of Wight, 1970) in Rutter (1986). The present sample consisted of 45.5 % of 11-year-olds, 38.2 % of 12-year-olds and 16.1 % of 13-year-olds. The findings of the present study reflected that none of the 11-year-old respondents showed depressive symptoms. The level of depression increased with the age of the respondents : 7.1

% of 12 year-old boys and 7.1 % of 13-year old boys were depressed while 5.0 % of 12-year-old girls and 2.5. % of 13-year-old girls were depressed. The findings of the study lent support to other studies with similar populations.

Generally speaking data from previous studies suggest that in prepubescent children, boys are equally or slightly more likely to report depression than girls. This gender difference reverses at some point during adolescence, with girls becoming much more likely to report depression than boys. The findings of the present study report that according to the CDI, 5.9 % of males and 4.4 % of girls are depressed. These findings support the findings of the study by Anderson et al., 1987 which stated that slightly more male than female preadolescent children would be depressed. It must be noted that there were more girls than boys in this study (28 boys, 40 girls).

Studies in race differences in depression have been neglected by most researchers. One of the reasons for this neglect could be attributed to the considerable controversy about the impact of language and cultural values embedded in research methods. This study's sample consisted of : 57.4 % African; 4.4 % Coloured; and 38.2 % Indian respondents. There were 68 respondents and 10.3 % were depressed. The depressed sample consisted of : 5.9 % African; 2.9 % Coloureds; and 1.5 % Indians. The researcher is of the opinion that the larger percentage of African depressed respondents could be ascribed to the past as well as present political situation in South Africa.

With respect to the rate of depression and the area the respondents live in, the following data emerged from the study . Fifty percent of the sample live in African areas; 45.6 % live in Indian areas and 4.4 % live in other areas. The 10.3 % depressed sample is made of the

following : 7.4 % from African areas; 1.5 % from Indian areas; and 1.5 % from other areas. The researcher has commented that this could be a result of the fact that the African areas (historically) were not adequately developed and the homes were of a sub-economic standard. Secondly it is assumed (anecdotal evidence) that children compare what they see on television to the reality at home.

It would be expected that children who live with one parent or with guardians would have more reason to be depressed than those who live with both their parents. Fifty nine percent of the sample live with both parents, 32 % live with only their mum and 8.8 % live with grandparents or guardians. The results of the study in this respect were a little unusual . The depressed sample (10.3 %) comprised of : 4.4 % who live with both parents; 4.4 % who live with only mum; and 1.5 % who live with grandparents or guardians. The reasons for this situation could be clarified in a further in depth study with the same sample.

Previous research shows that home factors can increase the risk for maintenance, if not development, of depression. Many studies suggest that the emotional climate in families with depressed children is less cohesive, less emotionally expressive, more hostile, more critical, less accepting, and more disorganized than in families without depressed children (Hammen & Rudolph, 1996) in Gilbert (1997).

Longitudinal studies should test the hypothesis that positive relationships between parents and children have a protective effect against depression, as opposed to family disharmony leading to depression.

The findings of this study support the inference that poor relationships with parents can be a contributory factor in depression in children. On the CDI, the scale B (Interpersonal Relationships) shows that the depressed group scored a mean of 3.43 (Max 8). In the Questionnaire the depressed group's mean score on the subscale A (Relationship with parents) is 4.00 (max of 5). The non depressed mean on the same scale is 3.16 (max of 5). This indicates that this was a strong factor that may account for the depression in the depressed sample. Relationship with parents also affected the non depressed sample which indicates the value that children place on the positive interaction with parents.

Many of the respondents indicated that they found their parents too strict, wanted more quality time with their parents, worried about their parents falling ill and were conscious of disappointing their parents.

With respect to relationship with siblings, although a few studies indicate that a problematic relationship could cause an at risk child to be depressed, there is a need for more conclusive evidence in this regard. The sub-section B on the Questionnaire (Relationship with siblings) reflected the following means : depressed (3.57) ; non depressed (2.79) the maximum score is 5. Although the means of both groups are relatively high, much more conclusive evidence is needed to authenticate these findings.

The means of the sub-section C (Self Perception at home) on the Questionnaire for the depressed group (2.71) and for the non depressed group (2.30) maximum 5 - indicate that both groups hoped to be treated with more respect at home, want to have their opinions taken seriously, and wanted to improve their behaviour.

The discussion on living conditions starts with the question of the sharing of their bedrooms. Although a large percentage indicated that they shared their bedrooms, only a very small proportion of these were angry about it. A substantial portion of those who shared their bedrooms indicated that they did not mind. A small percentage wanted more privacy and some even indicated that they would tell the others in their bedroom to go away.

Many of the respondents seemed to be happy with their home situation because only 26 % complained about the noise (meaning in the neighbourhood), 7.4 % complained about the facilities at home. And 22.1 % complained about the cleanliness (neighbourhood).

Hammen & Rudolph (1996) in Gilbert (1997) found in their research that generally interpersonal problems with teachers and peers could be developmental risks for the development of depression. Puig-Antich (1985) in Shah & Morgan (1996) found that among other facts, children with depression have problematic relationships with their teachers.

The data of the present study adds weight to the previously mentioned two studies by lending support to the inference that if a child's relationship with his teacher is a problematic one, then it could contribute to depressive symptoms. The mean of the depressed group on the relationship with teachers is high enough to attract attention. Teachers serve in place of the parents at school. They also should serve as good role models to their charges. But if as the results of the study indicate, that the respondents rate the teachers as too strict, feel they are unfairly treated by their teachers, are quite nervous in their teachers' presence and enjoyed having their teachers' being absent from school, then measures have to be taken on a school level to rectify the situation.

It has been demonstrated that children who have difficulties with peer relationships are likely to be depressed (Cole & Carpentieri, 1990) in Cole, Martin , Powers, Truglio (1996). Research also shows that depressed children have problems with peers (Berney et al , 1991). The data from the study reflects that relationships with peers in this sample are positive and intact. The depressed sample's mean score on this sub-section of the Questionnaire was 1.29. Both through the researcher's and the two teachers' inputs it was ascertained that this was in fact the situation at the school. The teachers further commented that they ensured that children's interactions at school were on a positive note. A significant fact was that 91 % of respondents scored 2 and below out of a possible 5 on this sub-section.

It is clear from the many studies conducted on the relationship between self-esteem and depression, that poor self-esteem and perceived academic inadequacy appear to be important issues with respect to the development of childhood depression. The findings from the Questionnaire in this study, however, do not lend support to the inference stated above. The mean score for both the depressed and non depressed on the Questionnaire are low enough to assume that the respondents were well adjusted individuals.

However, the analysis of the scale C (Ineffectiveness) of the CDI reflects that the mean score for the depressed group lend partial support to the inference that depression and academic and social inadequacy are interrelated. Analysis of scale E (Negative self-esteem) of the CDI also reflects that the depressed group's mean lends support to studies that purport that children with low or negative self esteem show symptoms of depression.

Evidence has shown that a number of symptoms of depression are likely to have an adverse effect on the academic performance of a child. Although the Questionnaire or the CDI were not used to assess a child's academic performance, it was the respondent's perception of their academic efficiency that was assessed. The results of this sub-section of the Questionnaire reflect that the respondents generally perceive themselves as academically competent and appear to be satisfied with their progress in schoolwork.

Although research has found that difficulties with academic performance often plague children with depression, analysis of the data from the Questionnaire show that the means of both the depressed and non depressed groups perceived that they were coping with schoolwork.

However, the scale C (Ineffectiveness) on the CDI show that the depressed group perceive themselves as socially and academically incompetent. The difference in the results from the CDI and Questionnaire could be because of the type of statements each contains. The statements on the CDI are quite general e.g I do everything wrong ; while the statements on the Questionnaire are quite specific e.g. I am not happy with my progress with schoolwork.

7.2.2 Findings in respect of previous research studies

For decades researchers and practitioners have puzzled over depression in children. In spite of the controversies surrounding childhood depression, there is now an emerging body of knowledge about the nature, assessment, and treatment of this condition.

The present stance on childhood depression therefore, is that children do experience depressive feelings and disorders, but there are many incongruent views about the origins of depression. Many of these explanations are actually downward extensions of theory and findings from adult depression.

Developmental psychopathology is one of the newly emerged theories of childhood depression. It has been described as a macroparadigm rather than a unitary theory. This is because it represents a movement towards understanding psychopathology and its causes, determinants, course, sequelae, and treatment by integrating knowledge from multiple disciplines within a developmental framework. According to Cicchetti and Toth (1991), developmental psychopathology seeks to unify within a developmental (life-span) framework, the many contributions to the study of depression emanating from multiple fields of enquiry, including psychiatry, psychology, neuroscience, sociology, cultural anthropology, epidemiology, biostatistics, and psychometrics.

The prevalence rates of major depression in children and adolescents show marked differences as a result of the varying methods of assessing depression and changing criteria for the diagnosis of depression. Generally research has found no differences in gender of prepubescent depressed children (e.g., Kashani et al., 1983; Lefkowitz & Tesiny , 1985; Lobovits & Handal, 1985) in Kazdin (1990). On the other hand researchers have found that among adolescents, the prevalence is greater among females than males (e.g., Mezzich & Mezzich, 1979; Reynolds, 1985) in Kazdin (1990). Since in adulthood, depression is generally more prevalent among women than men, research seems to suggest that adult depression has its beginnings in adolescence.

Family interaction may also play a potentially significant role in the development of childhood depression. Research has suggested that parental resentment and rejection of the child, lack of affection, uninvolved, and emotional detachment occur early in family life and contribute to subsequent childhood depression (Crook, Raskin, & Eliot, 1981; Lefkowitz & Tesiny, 1984) in Messer & Gross (1995).

Disturbances in academic performance and peer relationships in school are some of the earliest signs of depression in school age children. Academic performance and childhood depression are often interrelated. Nolen-Hoeksema et al., (1992) in Boivin, Poulin, Vitaro (1994) found that depression was a predictor of poor academic achievement. Similarly Puig-Antich (1985) in Ines,& Sacco (1992) reported that once depressive symptoms disappeared, children's academic performance returned to normal levels.

Depressed children tend to have few friendships and poor peer relationships (Goodyer et al., 1989; Puig-Antich et al., 1985).The findings from various studies suggest that children who receive high scores on self-ratings of depression not only perceive themselves as being less socially competent, but also tend to be neglected or rejected by their peers (Asarnow, 1988; Kennedy, Spence, & Hensley, 1989; Faust, Baum, & Forehand, 1985; Blechman, McEnroe, Carella, & Audette, 1986) in Boivin, Poulin, Vitaro (1994).

7.4 Strengths and Limitations of this study

Although research has clearly established that both clinic and non-clinic samples can report on their depressive symptoms (Cantwell, & Carlson, 1983), a major issue to contend with is the extent to which children are capable or willing to report their symptoms. According to some researchers children are likely to be better reporters of symptoms related to private or internal experience, whereas significant others such as parents, teachers, peers and siblings are better informants in relation to the children's overt behaviours (Edelbrock, Costello, Dulcan, Conover & Kalas, 1986; Kazdin, Colbus & Rodgers, 1986; Orvaschel, Puig-Antich, Tabrizi & Johnson, 1982).

Therefore the researcher counts as a limitation the fact that parent or teacher assessment into the externalizing behaviours of depressed children was not used in this study. Parents are frequently used as the source of information to assess their children's depression because they are readily available as informants, and are knowledgeable about their child's behaviour across time and situations. However, in this particular sample, the researcher has had confidential information about the parents' non attendance at parent-teacher meetings and their general disinterest in the educational matters pertaining to their children.

The researcher assumed that asking the parents to fill in questionnaires regarding their children's depression might have presented a few problems on the part of the parents. No parent would readily admit to having a depressed child, given the stigma some people attach to mental disorders. With regard to using the teacher input this was also not a feasible idea as one teacher was temporary and the other was a substitute for that year. Both these teachers would not have been able to make significant comments as they had not known the children

for a long enough time. Bearing these points in mind, the researcher thought it sensible not pursuing this line of thought.

Several studies have shown that alternative measures of childhood depression correlate with each other (e.g., Evens & Rehm, 1988; Kazdin et al., 1983; Anderson and Bartell, 1985) in Harrington (1993). Measures of depression and related constructs (e.g., hopelessness, self-esteem) correlate consistently when the same rater completes the measures (Kazdin, 1988) in Harrington (1993). Although a questionnaire was developed for this study, the researcher should have used another popular, well researched inventory to enrich the findings . Although this was not a serious limitation (researcher's view), it was a limitation nonetheless.

Validity of the results will always be a contentious issue in a study such as this. There is always a possibility that certain statements were deliberately not answered honestly in an attempt to appear " normal". However, all attempts were made by the researcher to inform respondents about the anonymity of their responses. While the researcher believes that this was achieved to a certain extent, it is something that cannot be entirely disproved.

The sample used in this study, was located in Reservoir Hills, a suburb which has predominantly Indian residents and a sprinkling of African residents. Although the study contained a very small percentage of respondents from the Coloured race, there were no White respondents. Also the study did not contain a sampling from other primary schools in the area. These facts limit the generalizability of the results as the sample was not representative of the general South African preadolescent population.

One of the major strengths of this study was that the Questionnaire correlated significantly and positively with the CDI. The CDI is a popular, reliable and validated instrument used in the field of childhood depression. The implication is that when scales from the CDI were compared to sections and subsections of the Questionnaire, the results can be considered to have some validity.

Also , the sample consisted of a relatively acceptable number for a study of this nature. All the parents consented to their children participating and all the respondents were willing to participate. This ensured that the response rate was in excess of 80 %, and this made the sample statistically acceptable.

7.4 Recommendations

7.4.1 Parents

Given the breakdown of the nuclear family, unprecedented divorce rates, increasing child abuse, rampant criminal violence, and increasing pressure , largely media-induced, on younger children to attain sexual sophistication, there is reason to believe that contemporary societal disintegration, with its evident impact on children's secure development, will affect childhood depression in growing numbers (Stark, 1990).

Since many research findings implicate the home and factors within it as potential risk factors for the development of depression , parents should be made aware of how they can provide their children with protective factors. The respondents in the study indicated that they found their parents to be very strict and spent inadequate time with their children. Parents could be schooled in parenting techniques to overcome some of these problems.

Because of the potential influence that parents can exert over their children, a family-or-parent based treatment warrants consideration. Several avenues of work support the focus on the family (Burbuch & Borduin, 1986). To begin with, depressed children are more likely to come from homes with a depressed parent than children without such a diagnosis. Focus on the depression of the parent may have impact on the child's symptoms as well. Families with a depressed parent are characterized by less cohesion and expressiveness, more conflict, and less emphasis on the development of independence, moral and religious values, and participation in joint activities (Billings & Moos, 1983) in Kazdin (1990).

Without considering parent dysfunction, parents might be utilized to alter their children's symptoms of depression. For example, parents can serve as trainers of their children to structure activities and to manage behavioural programmes that promote participation in activities and social interaction. Parent management training has been well developed as a technique to manage externalizing behaviours, especially childhood aggression (Kazdin, 1985; Patterson, 1982) in Lewinsohn & Gotlig (1995). Parents are trained to implement alternative reinforcement and punishment techniques, to alter coercive child behaviours in the home and to promote prosocial behaviour.

7.4.2 School Personnel

The awareness of childhood depression may prove as important within the schools during this decade as child abuse has been in the past decade. Counsellors can anticipate increased occurrences of depressed moods and behaviours within the schools. Although many schools do not have counsellors or psychologists, there is much that can be done within school settings to moderate, remediate, and even effectively rehabilitate depressive symptoms.

School represents a unique situation for children that may be incorporated into treatment. Special influences such as peers can be incorporated into treatment to promote behaviours that may combat depressive symptoms in individual children. In the school environment, the contingencies will be under the control of the teacher and the powerful influences of peers can be mobilized to alter specific behaviours.

As providers of psychological services to children and adolescents, it is evident that school psychologists can and should play a role in the assessment and treatment of this disorder. Primary prevention and early intervention with children considered at risk for psychopathology should be one of the focus points of a school psychologist. School psychologists should spend a significant amount of time evaluating and treating children referred to them on the basis of "special needs".

The first step in helping depressed children is gaining awareness of this disorder and being observant for its clinical manifestations. Self-referral is rare and parents often tend to minimize or deny depression in their children. School psychologists can be involved at many different levels: they can educate teachers to look for specific behavioural symptoms and assess suspected depressed children, refer affected children for in- or out-patient treatment and co-ordinate school-based interventions with other psychiatric and psychological treatments.

The psychologist can make teachers aware of some of the symptoms that may suggest depression in children : withdrawal and lack of verbalization , lack of academic and social motivation, cognitive disturbances (diminished ability to think, feelings of inadequacy, sense

of hopelessness), prevailing sense of sadness, despondency, crying and loneliness, acting out behaviours (including aggressiveness, hyperactivity, drug abuse, truancy), physical upsets (sleep disturbances, fatigue, weight change, and suicidal thoughts and actions). Once teachers become aware that these symptoms describe a child in need of professional help, not just a disobedient or rebellious child, a part of the process of helping and healing can begin.

One treatment recommendation is changing the classroom environment (including the teacher-pupil relationship), building social skills, improving problem solving strategies. Treatment of depressed children should be a shared responsibility between the school and community with the psychologist playing an active role. Evidence in the psycho-educational literature does suggest the feasibility of treating depressed children in the school setting with cognitive-behavioural strategies.

As part of the preventative measures, it is crucial to educate children, parents, and teachers, about early -onset depression. There is evidence that educational approaches to depression may improve compliance and social and academic outcomes of school children as much as cognitive interventions.

A school-based multi-component affective curriculum for the treatment and prevention of depression in children should be explored. The proposed curriculum should be administered by teachers and should focus on the development of coping skills to deal with stress and the ability to recognize significant intra-and extra-familial stressors. Additional competencies addressed by the curriculum should include the recognition of how an individual's behavioural and cognitive responses affect mental health.

A review of child and adolescent depression shows clearly that this affective disorder is an important problem which warrants the attention of the relevant authorities. Furthermore, as individuals responsible for the mental health of children, school psychologists need to take an active roles in the promotion of primary prevention activities.

It is hoped that the recommendations made will alert school personnel as well as parents to the disorder and the ways in which they can assist in alleviating some of the symptoms as well as providing protective factors to ensure a decrease in the occurrence of childhood depression.

7.5 Conclusion

It is critical to develop longitudinal research to further examine the individual, family, school, and other risk factors that contribute to childhood depression. Prevention trials based on an improved understanding of risk and resilience are needed. For example, if children with conduct disorders were routinely evaluated and subsequently treated for early symptoms of depression, would depression be reduced in frequency, severity, and duration? Studies must examine transactional models of interpersonal functioning among children with depression and family members, who may themselves be suffering from depression, which may further complicate the research.

Culturally sensitive diagnostic tools and interventions must be provided for children of diverse ethnicities whose rates of depression may be adversely affected by environmental conditions and limited access to services.

The present study investigated the prevalence of depression in primary school preadolescent children. The results of the study indicated that a relatively high percentage of children were depressed. The level of depression increased with the age of the respondents, in keeping with well known research findings. There was a negligible difference in the gender of the respondents in the rate of depression. Some of the factors from the home which may have impacted on the depressive symptoms were relationship with parents, relationship with siblings, neighbourhood cleanliness and facilities, and the way they were treated at home. Some of the factors from school include relationship with teacher, and the cleanliness and facilities at school.

The implications of this study for the future include awareness programmes about early-onset depression which should be aimed at parents and schools in general. Risk and protective factors should be included in these programmes. Children, especially those at risk for developing depression, should be given sufficient information on the factors that would most likely cause them to fall into a depressive state, so that they can help themselves by understanding what they are feeling. It is not too late to start on the development of intervention and prevention programmes that can be tailor made to suit nations, countries, cultures, linguistic groups, communities, and the children themselves. Perhaps in a decade or two, if we are lucky, children of the world will lead the happy, carefree lives of the children of the past.

LIST OF REFERENCES

Abrahams, M.J. & Whitlock, F.A. (1969). Childhood Experience and Depression. The British Journal of Psychiatry, 115, 883 – 888.

American Psychiatric Association . (1994). Diagnostic and Statistical Manual of Mental Disorders. (4th. Ed). Washington, D.C.

Anderson, G. (1990). Fundamentals of Educational Research. New York. Farmers Press.

Angold, A., Costello, E.J. (1993). Depressive Comorbidity in children and adolescents : empirical, theoretical, and methodological issues. American Journal of Psychiatry, 150, 1779 – 1791.

Babbie, E.R. (1977). Survey Research Methods. California. Wadsworth Publishing Company

Bandura, A ., Pastorelli, C., Barbaranelli, c., & Caprara, G.V. (1999). Self-Efficacy Pathways to Childhood Depression. Journal of Personality and Social Psychology, 76, 258 – 269.

Bemporad, J.R. (1994). Dynamic and Interpersonal Theories of Depression. In : Reynolds & Johnston (Eds.). Handbook of Depression in Children and Adolescents. New York. Plenum Press.

Benfield, C.Y., Palmer, D.J. Pfefferbaum., B Stowe, M.L. (1988). A comparison of Depressed and Nondepressed Children on Measures of Attributional Style, Hopelessness, Life Stress, and Temperament. Journal of Abnormal Child Psychology, 16 397 – 410.

Berney, T.P., Bhate, S.R., Kolvin, I., Famuyiwa, O.O., Barrett, M.L., Fundudis, T., Tyrer, S.P. (1991). The Context of Childhood Depression. The Newcastle Childhood Depression Project. British Journal of Psychiatry (1991), 159, 28 – 35.

Birleson, P. (1981). The validity of Depressive Disorder in childhood and the Development of a self-Rating scale : A Research Report. Journal of Child psychology and Psychiatry, 22, 73 – 88.

Birmaher, B., Ryan, N.D., Neal, D., Douglas, E., Williamson, B.A., Brent, D.A., Kaufman, J. (1996). Childhood and Adolescent Depression : a Review of the Past 10 Years. Part I. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 1427 – 1439.

Birmaher, B., Ryan, N.D., Neal, D., Douglas, E., Williamson, B.A., Brent, D.A., Kaufman, J. (1996). Childhood and Adolescent Depression : a Review of the Past 10 Years. Part II. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 1575 – 1583.

Black, J.A. & Champion, D.J. (1976). Methods and Issues in Social Research. London. Wiley and Sons, Inc.

Bless & Achola. (1988). Fundamentals of Social Research Methods. Lusaka. Government Printers.

Blechman, E.A., McEnroe, M.J., Carella, E.T., & Audette, D.P.(1986). Childhood Competence and Depression. Journal of Abnormal Psychology, 95, 223 – 227.

Blumberg, S.H. & Izard, C.E. (1985). Affective and Cognitive Characteristics of Depression in 10- and 11-year-old Children. Journal of Personality and Social Psychology, 49, 194 – 202.

Boivin, M., Poulin, F., Vitaro, F. (1994). Depressed Mood and Peer Rejection in Childhood. Development and Psychopathology, 6, 483 - 498

Bowlby, J. (1980). Attachment and Loss : Vol.3. Loss, Sadness and Depression. New York. Basic Books.

Cantwell, D.P. & Carlson, G.A. (1983). Affective Disorders in Childhood and Adolescents: An Update. New York. SP Medical and Scientific Books.

Carlson, G.A. & Cantwell, D.P. (1980). Unmasking Masked Depression in Children and Adolescents. American Psychiatric Association, 137, 445 – 449.

Chen, X. Rubin, K.H. Li, B. (1995). Depressed mood in Chinese Children : Relations with School Performance and Family Environment. Journal of Consulting and Clinical Psychology, 63, 938 – 947.

Cicchetti, D., & Schneider-Rosen, K (1986). An Organizational approach to Childhood Depression. In : Rutter, M., Izard, C.E., & Read, P.B. (Eds.).Depression In Young People. The Guilford Press.

Cicchetti, D. Rogosch, F.A. & Toth, S.L. (1994). A Developmental Psychopathology Perspective on Depression in Children and Adolescents. In : Reynolds & Johnston (Eds) Handbook of Depression in Children and Adolescents. New York. Plenum Press.

Cicchetti, D & Toth, S.L. (Eds.). (1996). Developmental Perspectives on Depression. Rochester Symposium on Developmental Psychopathology, Vol.4. University of Rochester Press.

Cicchetti, D. Toth, S.L. (1998). The Development of Depression. American Psychologist, 55, 221 – 241.

Cohen, L. (1980). Educational Research in Classrooms and Schools. London. Harper and Row.

Cole, D.A., Martin, J.M. Powers, B. Truglio, R. (1996). Modeling Causal Relations between Academic and Social Competence and Depression : A Multi- Multimethod Longitudinal Study of Children. Journal of Abnormal Psychology, 105, 258 – 270.

Clarizio, H.F. & Payette, K. (1990). A survey of School Psychologists' Perspectives and Practices with Childhood Depression. Psychology in the Schools, 27, 57 – 63.

Craig, K.D. & Dobson, K.S. (Eds.)(1995). Anxiety and Depression in Adults and Children. Sage Publications.

Crowley S.L. & Emerson, E.N. (1996). Discriminant Validity of Self-Reported Anxiety and Depression in Children : Negative Affectivity or Independent Constructs ? Journal of Clinical Child Psychology, 25, 139 – 146.

Cytryn, L., Gershon, E.S., McKnew, D.H. (1984). Childhood Depression : Genetic or Environmental Influences ? Integrative psychiatry, 2, 17 – 23.

Cytryn, L., McKnew, D.H. (1972). Proposed Classification of Childhood Depression. American Journal of Psychiatry, 129, 63 – 69.

Cytryn, L., Mcknew, D.H. (1996). Growing up Sad – Childhood Depression and its Treatment. WW Norton and Company.

Dion, R. Gotowiec, A. Beiser, M. (1998). Depression and Conduct Disorder in Native and Non-Native Children. Journal of the American Academy of Child and Adolescent Psychiatry, 37, 736 – 742.

Finch, A.J. Saylor, C.F. & Edwards, G.L. (1985). Children's Depression Inventory : Sex and Grade Norms for Normal Children. Journal of Consulting and Clinical Psychology, 53, 424 – 425.

Fleming, J.E. & Offord, D.R. (1990). Epidemiology of childhood depressive disorders: a critical review. Journal of the American Academy of Child and Adolescent Psychiatry, 29, 571 – 580.

Fristad, M.A. Emery, B.L. Beck, S.J. (1997). Use and Abuse of the Children's Depression Inventory. Journal of Consulting and Clinical Psychology, 65, 699 – 702.

Gilbert, M.C. (1997). Childhood Depression : A Risk Factor Perspective. In : Frazer, M.W. (Ed.) Risk and Resilience in Childhood.

Gotlib, I.H., & Hammen, C.L. (1992). Psychological Aspects of Depression. John Wiley and Sons, Ltd.

Hammen, C. (1991). Depression Runs in families. Springer-Verlag. New York Inc.

Harrington, R. (1993). Depressive disorder in childhood and adolescence. New York. John Wiley and Sons.

Hart, S.L. (1991). Childhood depression : implications and for school counselors. American School Counselor Association, 25, 277-289.

Hodges, K. & Craighead, W.E. (1990). Relationship of Children's Depression Inventory Factors to Diagnosed Depression. Psychological Assessment, 2, 489 – 492.

Ines, T.M. & Sacco, W.P. (1992). Factors related to Correspondence Between Teacher Ratings of Elementary Student Depression and Student Self-Ratings. Journal of Consulting and Clinical Psychology, 60, 140 – 142 .

Kaelber, C.T. Moul, D.E. & Farmer, M.E. (1995). Epidemiology of Depression. In : Beckham, E.E. & Leber, W.R. (Eds.). Handbook of Depression. The Guilford Press.

Kashani, J.H., & Schmid, L.S. (1992). Epidemiology and Etiology of Depressive Disorders. In : Shafii, M. & Shafii, S.L. (Eds.). Clinical Guide to Depression in Children and Adolescents. American Psychiatric Press.

Kaslow, N.J. Brown, R.T. & Mee, L.L. (1994). Cognitive and Behavioural Correlates of Childhood Depression : A Developmental Perspective. In : Reynolds & Johnston (Eds .) Handbook of Depression in Children and Adolescents. New York. Plenum Press.

Kaslow, N.J. & Rehm, L.P. (1991). Childhood Depression. In : Kratochwill, T.R. & Morris, R.J. (Eds.). The Practice of Child Therapy. Pergamon Press.

Kazdin, A.E. (1990). Childhood Depression. Journal of Child Psychology and Psychiatry, 31, 121 – 160.

Kendall, P.C. (1992). Anxiety Disorders in youth : Cognitive-behavioral interventions. Boston : Allyn & Bacon.

Kendall, P.C., Brady, E.U. (1995). Comorbidity in the Anxiety Disorders of Childhood. In : Craig, K.D., & Dobson, K.S.(Eds) (1995). Anxiety and Depression in Adults and Children. Sage Publications.

Klerman, G.L. & Weissman, M.M. (1989). Increasing rates of Depression. Journal of the American Medical Association, 261, 2229 – 2235.

Kovacs, M., Feinberg, T.L., Crouse-Novak, M.A. et al, (1984). Depressive Disorders in childhood: A Longitudinal prospective study of characteristics and recovery. Archives of general Psychiatry, 41, 229 – 237.

Kovacs, M. (1985). The Children's Depression Inventory (CDI). Psychopharmacology Bulletin, 21 995 – 998.

Kovacs, M. (1997). Depressive Disorders in Childhood : An Impressionistic Landscape. Journal of Child Psychology and Psychiatry, 38, 287 – 298.

Lewinsohn, P.M. & Gotlib, I.H. (1995). Behavioral Theory and Treatment of Depression. In: Beckham, E.E. & Leber, W.R. (Eds). Handbook of Depression. The Guilford Press.

Lonigan, C.J. Carey, M.P. & Finch, A.J. (Jr.).(1994). Anxiety and Depression in Children and Adolescents : Negative Affectivity and the Utility of Self-Reports. Journal of Consulting and Clinical Psychology, 62, 1000 – 1008.

Manassis, K. & Hood, J. (1998). Individual and Familial Predictors of Impairment in Childhood Anxiety Disorders. Journal of the American Academy of Child and Adolescent Psychiatry, 37, 428 – 434.

McWhirter, B.T. & McWhirter, J.j. (1997). Depression in Childhood and Adolescence : Working to Prevent Despair. In : Capuzzi, D. & Gross, D.R. (Eds.). Youth at Risk : A Prevention Resource for Counselors, Teachers, and Parents. American Counseling Association

Messer, S.C. & Gross, A.M. (1995). Childhood Depression and Family Interaction. Journal of Clinical Child Psychology, 24, 77 – 88.

Miller, J.A. (1998). The Childhood Depression Sourcebook. Lowell House. NTC Contemporary Publishing Group.

Mitchell, R. (1975). Depression. Penguin books.

Nemeroff, C.B. (1998). The Neurobiology of Depression. Scientific American, 278, 42 – 49.

National Institute of Mental Health – Depression in Children and Adolescents (2000). Nihh.nih.gov. (Internet site)

Nilzon, K.R. & Palmerus, K.(1997). The Influence of Familial Factors on Anxiety and Depression in Childhood and Early Adolescence. Adolescence, 32, 935 – 943.

Nolen – Hoeksema, S. (1987). Sex differences in Unipolar Depression: Evidence and Theory. Psychological Bulletin , 101, 259 – 282 .

Nurcombe, B. (1994) The Validity of the Diagnosis of major depression in Childhood and Adolescence. In : Reynolds & Johnston (Eds). Handbook of depression in Children and Adolescents. New York. Plenum Press.

Poznanski, E.O. (1982). Controversy and Conflicts in Childhood Depression. Journal of children in contemporary society, 15, 3 – 10.

Renouf, A.G. Kovacs, M. & Mukerji, P. (1997). Relationship of Depressive, Conduct, and Social Functioning in Childhood. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 998 – 1004.

Reynolds, W.M. (1984). Depression in Children and Adolescents : Phenomenology, Evaluation and Treatment. School Psychology Review, 13, 171- 182.

Reynolds, W.M. (Ed.) (1992). Internalizing disorders in children and adolescents. New York: Wiley.

Reynolds, W.M. (1994). Assessment with Self-Report Questionnaires. In : Reynolds, W.M., & Johnston, H.F. (Eds.). Handbook of depression in children and adolescents. New York : Plenum Press.

Rutter, M. (1986). The Developmental Psychopathology of Depression. In : Rutter, M., Izard, C.E. & Read, P.B. (Eds.).Depression in Young People. The Guilford Press.

Ryan, N.D. et al., (1987). The Clinical Picture of Major Depression in Children and Adolescents. Archives of General Psychiatry, 44, 854 – 861.

Saylor, C.F. et al., (1984). Construct Validity for Measures of Childhood Depression : Application of Multitrait-Multimethod Methodology. Journal of Consulting and Clinical Psychology, 52, 977 – 985.

Schlebusch, L. (Ed.). Depression – A Basic guide to diagnosis and treatment.

Seligman, M.E.P. (1975). Helplessness : On Depression , Development and Death.W.H. Freeman and Company.

Seligman, M.E.P. & Peterson, C. (1986). A Learned Helplessness Perspective on Childhood Depression: Theory and Research. In : Rutter, M., Izard, C.E., & Read, P.B. (Eds.). Depression in Young People. The Guilford Press.

Shah, F. & Morgan, S.B. (1996). Teacher's Ratings of Social Competence of Children with high versus low levels of Depressive Symptoms. Journal of School Psychology, 34, 337 – 349.

Shaw, B.F. & Katz, R. (1990). Cognitive Theory of Depression . In : Ingram, R.E.(Ed). Contemporary Psychological Approaches to Depression. Plenum Press.

Sherak, D.L. Speier , P.L., Hirsch, S., Cantwell, D.P.(1994). Classification and Diagnostic Criteria. In : Reynolds and Johnston (Eds). Handbook of Depression in Children and Adolescents. New York. Plenum Press.

Speier, P.L., Sherak, D.L., Hirsch, S., Cantwell, D.P. (1995). Depression in Children and Adolescents. In : Beckham, E.E. & Leber, W.R. (Eds.). Handbook of Depression.The Guilford Press.

Stark, K.D. (1990). Childhood depression : School-based interventions. New York : Guilford.

Varma, V. (Ed.). (1993). Coping with Unhappy Children. Library of Congress Cataloguing.

Wessels, J.S.(1989). Childhood Depression : Issues in Definition, Diagnosis and Treatment. Published Masters Thesis. University of Cape Town.

Yu, D.L. & Seligman, M.E.P. (2002). Preventing depressive Symptoms in Chinese Children. Prevention and Treatment, 5. American Psychological Association.



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The Head of Research
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RE : PERMISSION TO ADMINISTER QUESTIONNAIRES AT
RESMOUNT PRIMARY SCHOOL - 2002
REGION : SOUTH DURBAN
DISTRICT : CHATSWORTH
GEOGRAPHICAL LOCATION : RESERVOIR HILLS

I, Mrs. R. Naidu (persal number 10940341), am presently a 2nd year student in Masters in Education (Educational Psychology) at University of Durban - Westville. In our second year we are expected to submit a dissertation as part fulfillment towards completion of the degree.

The topic for my dissertation is : THE PREVALENCE OF DEPRESSION IN PRIMARY SCHOOL CHILDREN AND THE FACTORS AT HOME AND AT SCHOOL THAT MAY CONTRIBUTE TO DEPRESSION. The dissertation will be supervised by Dr.Z. Naidoo of the University. I hereby request permission to administer the Children's Depression Inventory (CDI) and a questionnaire to the grade 6 learners at Resmount Primary School. My sample constitutes 75 to 80 children with an age range of 11 - 12 years. The CDI was developed and standardized by Maria Kovacs in 1992.

The completion of the Children's Depression Inventory (CDI) and the questionnaire will require 30 minutes each on two separate days. Parental permission will be sought by letter (enclosed). A letter to the children concerned asking for their co operation (after parental permission is granted) is also enclosed . I will liaise with the principal of the school regarding the details. A copy of the letter to the principal is enclosed.

Attached please find a copy of the questionnaire and a copy of Children's Depression Inventory . I will forward a copy of my dissertation when it is completed.

Hoping for a favourable reply.

Mrs. R. Naidu (10940341)
Student No. 7507978

Dr. Z. Naidoo
Supervising Psychologist



University of Durban-Westville

PRIVATE BAG X54001 DURBAN
4000 SOUTH AFRICA
TELEGRAMS: 'UDWEST'
TELEX: 6-23228 SA
FAX: (031)204-4383
☎ (031)204-4111

Mrs R. Naidu
674 Annet Drive
Reservoir Hills
Durban
4091
2002-03-08

The Principal
Resmount Primary School

Dear Mrs V Thaver

RE: PERMISSION TO ADMINISTER QUESTIONNAIRES AND THE CHILDREN'S DEPRESSION INVENTORY (CDI) TO GRADE 6 LEARNERS

I am a level one educator at Resmount Primary school (persal number 10940341) and am currently completing my Masters in Education (Educational Psychology) at the University of Durban - Westville. As part fulfillment towards the completion of my degree I am required to submit a dissertation. The dissertation will be supervised by Dr. Z. Naidoo of the University.

The topic for my dissertation deals with the prevalence of childhood depression in primary schools. This very relevant yet sorely misunderstood area of childhood disorders invariably leads to poor academic performance and behaviour problems among other issues.

I hereby seek permission to administer the Children's Depression Inventory by Maria Kovacs to the grade 6 pupils at your school. This inventory is a fully developed , standardized assessment tool in the domain of childhood depression. It can be completed in 30 minutes. Learners who are identified as depressed according to scores from the CDI will be given a follow up questionnaire two weeks later. This questionnaire is designed to ascertain the factors which can contribute to depression. I estimate the questions can be answered in 30 minutes.

A letter requesting departmental permission has already been forwarded. A letter requesting parental permission will be sent out soon. A letter requesting co operation from the learners (after parental permission) will be given to all learners in Grade 6. Enclosed are copies of the letters.

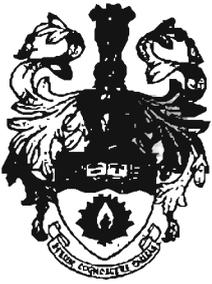
I look forward to your assistance.

Mrs. R. Naidu
Student - 7507978
(Tel 0833963425)

Dr. Z. Naidoo
(Supervising Psychologist)
UDW 031- 2044604

Request granted : Thaver
(Principal)

Date : 2002 - 05 - 09



University of Durban-Westville

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4000 SOUTH AFRICA
TELEGRAMS: 'UDWEST'
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FAX: (031)204-4383
☎ (031)204-4111

Dear Parent / Guardian

I am a level one teacher at Resmount Primary School. This year I am on unpaid leave from the department to complete my Masters in Education (Educational Psychology) at the University of Durban - Westville. In the second year we are expected to submit a thesis as part fulfillment towards completion of the degree.

For my thesis I plan to conduct some research into how children think and feel . I ask your permission to allow your child / ward to participate in the research programme. This will take place at school during school hours and will require nothing of the child except his / her time during the guidance period . The writing of names and other identifying information will not be necessary.

Departmental and principal's permission has already been sought.

Please indicate below whether you will allow your child / ward to participate in the research programme or not. Thank you for your assistance.

Hoping for a favourable reply.

Mrs. R. Naidu
(Intern Psychologist)

Dr. Z. Naidoo
(Supervising Psychologist)

The following are my contact details :
Mrs Rekha Naidu
674 Annet Drive
Reservoir Hills
Durban
4091

HOME : 031 - 2625277 (AFTER 16:00)
CELL : 08 33 96 34 25

I _____ parent / guardian of _____ in Grade 6 _____
hereby give / donot give permission for my child / ward to participate in the research
programme conducted by Mrs. R. Naidu.

Signature

Date



University of Durban-Westville

PRIVATE BAG X54001 DURBAN
4000 SOUTH AFRICA
TELEGRAMS: 'UDWEST'
TELEX: 6-23228 SA
FAX: (031)204-4383
☎ (031)204-4111

Mrs R Naidu
674 Annet Drive
Reservoir Hills
Durban
4091

Dear Children

I, Mrs R Naidu, am studying to be a psychologist at the University of Durban- Westville. I am interested in understanding how children think and feel. I have decided to use your school. Would you like to help me by answering some questions about yourself?

This is not a test. There are no right or wrong answers. There are no marks or results. You do not have to write your name.

I would really appreciate your help

Mrs R Naidu
Intern Psychologist

Dr. Z. Naidoo
Supervising Psychologist

#####

I _____, of Grade _____ would like to participate in the research programme.

Signature

Date

CDI

Item 1

- I am sad once in a while.
- I am sad many times.
- I am sad all the time.

Item 2

- Nothing will ever work out for me.
- I am not sure if things will work out for me.
- Things will work out for me O.K.

Item 3

- I do most things O.K.
- I do many things wrong.
- I do everything wrong.

Item 4

- I have fun in many things.
- I have fun in some things.
- Nothing is fun at all.

Item 5

- I am bad all the time.
- I am bad many times.
- I am bad once in a while.

Item 6

- I think about bad things happening to me once in a while.
- I worry that bad things will happen to me.
- I am sure that terrible things will happen to me.

Item 7

- I hate myself.
- I do not like myself.
- I like myself.

Item 8

- All bad things are my fault.
- Many bad things are my fault.
- Bad things are not usually my fault.

Item 9

- I do not think about killing myself.
- I think about killing myself but I would not do it.
- I want to kill myself.

Item 10

- I feel like crying every day.
- I feel like crying many days.
- I feel like crying once in a while.

Item 11

- Things bother me all the time.
- Things bother me many times.
- Things bother me once in a while.

Item 12

- I like being with people.
- I do not like being with people many times.
- I do not want to be with people at all.

Item 13

- I cannot make up my mind about things.
- It is hard to make up my mind about things.
- I make up my mind about things easily.

Item 14

- I look O.K.
- There are some bad things about my looks.
- I look ugly.

Remember, describe how you have been in the past two weeks.....

Item 15

- I have to push myself all the time to do my schoolwork.
- I have to push myself many times to do my schoolwork.
- Doing schoolwork is not a big problem.

Item 16

- I have trouble sleeping every night.
- I have trouble sleeping many nights.
- I sleep pretty well.

Item 17

- I am tired once in a while.
- I am tired many days.
- I am tired all the time.

Item 18

- Most days I do not feel like eating.
- Many days I do not feel like eating.
- I eat pretty well.

Item 19

- I do not worry about aches and pains.
- I worry about aches and pains many times.
- I worry about aches and pains all the time.

Item 20

- I do not feel alone.
- I feel alone many times.
- I feel alone all the time.

Item 21

- I never have fun at school.
- I have fun at school only once in a while.
- I have fun at school many times.

Item 22

- I have plenty of friends.
- I have some friends but I wish I had more.
- I do not have any friends.

Item 23

- My schoolwork is alright.
- My schoolwork is not as good as before.
- I do very badly in subjects I used to be good in.

Item 24

- I can never be as good as other kids.
- I can be as good as other kids if I want to.
- I am just as good as other kids.

Item 25

- Nobody really loves me.
- I am not sure if anybody loves me.
- I am sure that somebody loves me.

Item 26

- I usually do what I am told.
- I do not do what I am told most times.
- I never do what I am told.

Item 27

- I get along with people.
- I get into fights many times.
- I get into fights all the time.

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In Canada, 3770 Victoria Park Avenue, Toronto, ON M2H 3M6, (800) 268-6011. International, + 1-416-492-2627. Fax, + 1-416-492-3343 or 888-540-4484.



Remember to fill out the other side

Kovacs' Children's Depression Inventory (CDI) Profile Form

Child's Name: _____

Child's Age: _____

Date: _____

T	Total CDI Score				Negative Mood				Interpersonal Problems				Ineffectiveness				Anhedonia				Negative Self Esteem				T	
	Boys 7-12	Girls 7-12	Boys 13-17	Girls 13-17	Boys 7-12	Girls 7-12	Boys 13-17	Girls 13-17	Boys 7-12	Girls 7-12	Boys 13-17	Girls 13-17	Boys 7-12	Girls 7-12	Boys 13-17	Girls 13-17	Boys 7-12	Girls 7-12	Boys 13-17	Girls 13-17	Boys 7-12	Girls 7-12	Boys 13-17	Girls 13-17		
100	48+		58+	41+	12			12		8	5+					16								10	100	
99	47	44	52			12				8															99	
98	46	43	51	40												16									98	
97			50	39				11																	97	
96	45	42			11											15			16						96	
95	44	41	49	38																	10	10		9	95	
94	43	40	48			11	12				8	5				15			16		10				94	
93			47	37																15					93	
92	42	39	46	36				10	7							14									92	
91	41	38	45		10																		10		91	
90	40			35												14			15		9			8	90	
89		37	44	34			10	11			4								14			14			89	
88	39	36	43									7									9				88	
87	38	35	42	33										8					14						87	
86	37		41	32												13							9		86	
85		34	40		9		10		6																85	
84	36	33		31		9						4									8	8			84	
83	35		39													12	12		13					7	83	
82		32	38	30								6													82	
81	34	31	37	29				8						7		6							8		81	
80	33		36		8		9						8		8										80	
79	32	30	35	28		8													12						79	
78		29		27					5	3						11									78	
77	31	28	34																		11	7			77	
76	30		33	26			8												11				7	6	76	
75	29	27	32		7			7			5		7	6		7	5								75	
74		26	31	25		7						3													74	
73	28		30	24																					73	
72	27	25																								72
71	26	24	29	23				7		4													8	6	71	
70		23	28	22	6			6					6	5										5	70	
69	25		27			6						4			6										69	
68	24	22	26	21																					68	
67	23	21									2														67	
66			25	20				6																	66	
65	22	20	24	19																					65	
64	21	19	23		5	5		5	3			2	5	4	5									5	64	
63	20	18	22	18								3													63	
62			21	17				5																	62	
61	19	17																							61	
60	18	16	20	16																					60	
59			19		4	4		4					4		4	3									59	
58	17	15	18	15										3											58	
57	16	14	17	14				4	2																57	
56	15	13	16								1	2													56	
55				13																					55	
54	14	12	15	12	3	3		3				1	3												54	
53	13	11	14					3							3										53	
52	12		13	11										2											52	
51		10	12																						51	
50	11	9	11	10			2																		50	
49	10	8		9	2				1																49	
48	9		10					2	2																48	
47		7	9	8										1		2									47	
46	8	6	8	7																					46	
45	7		7			1				0															45	
44	6	5	6	6	1			1				0													44	
43		4											1												43	
42	5	3	5	5						0															42	
41	4		4	4										0											41	
40		2	3																						40	
39	3	1	2	3																					39	
38	2			2	0																				38	
37	1	0	1																						37	
36			0																						36	
35	0																								35	
34				0																					34	

QUESTIONNAIRE FOR GRADE 6 LEARNERS

NAME : _____

DATE OF BIRTH: ___/___/___/___

AGE 1 2 3 4

GENDER 1 2

POPULATION GROUP 1 2 3 4
A C I W

ADDRESS _____

_____ 1 2 3 4

ANSWER THE FOLLOWING QUESTIONS BY PLACING A CROSS IN THE BLOCK OF YOUR CHOICE.

1. I live with :

1 both parents

2 only mum

3 only dad

4 grandparents / guardians

2. How many bedrooms do you have in your house ?

1 1

2 2

3 3

4 4

3. Do you share your bedroom with others?

1 yes

2 no

4. How do you feel about sharing your bedroom with others ?

1 I feel very angry.

2 I wish I could tell them to go away.

3 I think I need more privacy.

4 I don't mind.

On pages 2 and 3 you will find statements made by children of your age.

If the statement describes you, then place a CROSS (x) in the YES column .

If the statement does not describe you, then place a CROSS (x) in the NO column.

STATEMENT	YES	NO
A.		
1. My parents are very strict.		
2. I worry about what would happen if my mum were sick.		
3. I wish my parents would spend more time with me.		
4. My parents come home very late from work.		
5. I wish my parents would discuss things with me more often.		
B.		
1. I argue a lot with my brothers and sisters.		
2. My brothers and sisters get me into trouble.		
3. My brothers and sisters irritate me all the time.		
4. I wish my brothers and sisters would play with me.		
5. I would like to be kinder to my brothers and sisters.		
C.		
1. I worry about disappointing my parents.		
2. At home nobody listens to me.		
3. I wish I was someone else.		
4. I am picked on by everyone at home.		
5. I must improve my behaviour at home.		
D.		
1. There are too many people living in my house.		
2. I have too many household jobs.		
3. I wish I had a room of my own.		
4. I don't have a proper place to do my homework.		
5. I wish we had a better home.		

STATEMENT	YES	NO
E.		
1. My teacher gets angry at me for no reason.		
2. I cover my work when my teacher walks by.		
3. I really like it when my teacher is absent from school.		
4. I am very nervous when I answer my teacher.		
5. My teacher is very strict.		
F.		
1. Some children say they don't like to be with me.		
2. My classmates make fun of me all the time.		
3. It's hard for me to make friends.		
4. My classmates don't like me.		
5. Other children are always fighting with me.		
G.		
1. I would rather work alone than in a group.		
2. I am the last to get picked for a game.		
3. Nobody listens when I talk.		
4. In games and sports, I watch instead of play.		
5. I give up easily when I make a mistake.		
H.		
1. I wish there were no reports.		
2. During tests, I find I cannot think		
3. I often get sick before a test or exam.		
4. My classmates understand schoolwork better than I do.		
5. I am not happy with my progress in schoolwork.		
<p>Dear learners, I want to thank you very much for your co-operation in filling in this questionnaire.</p> <p>Mrs R. Naidu</p>		

WRITE A FEW LINES ON HOW YOU FEEL ABOUT YOUR HOME ENVIRONMENT.

WRITE A FEW LINES ON HOW YOU FEEL ABOUT YOUR SCHOOL ENVIRONMENT.

Frequency Table

B Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	39	57.4	57.4	57.4
	C	3	4.4	4.4	61.8
	I	26	38.2	38.2	100.0
	Total	68	100.0	100.0	

C Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	F	40	58.8	58.8	58.8
	M	28	41.2	41.2	100.0
	Total	68	100.0	100.0	

D Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	31	45.6	45.6	45.6
	12	26	38.2	38.2	83.8
	13	11	16.2	16.2	100.0
	Total	68	100.0	100.0	

Area respondent lives in predominantly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African	34	50.0	50.0	50.0
	Indian	31	45.6	45.6	95.6
	White	3	4.4	4.4	100.0
	Total	68	100.0	100.0	

W Living with

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Both parents	40	58.8	58.8	58.8
	Only Mum	22	32.4	32.4	91.2
	Grandparents/Guardians	6	8.8	8.8	100.0
	Total	68	100.0	100.0	

X Number of bedrooms in House

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	7	10.3	10.3	10.3
2	21	30.9	30.9	41.2
3	21	30.9	30.9	72.1
4	19	27.9	27.9	100.0
Total	68	100.0	100.0	

Y Sharing bedroom

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	50	73.5	73.5	73.5
No	18	26.5	26.5	100.0
Total	68	100.0	100.0	

Z Feeling about sharing

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Angry	1	1.5	1.5	1.5
Tell them to go	6	8.8	8.8	10.3
Need privacy	19	27.9	27.9	38.2
Don't mind	42	61.8	61.8	100.0
Total	68	100.0	100.0	

AA Home-Noise

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	18	26.5	26.5	26.5
No	50	73.5	73.5	100.0
Total	68	100.0	100.0	

AB Home-Facilities

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	5	7.4	7.4	7.4
No	63	92.6	92.6	100.0
Total	68	100.0	100.0	

AC Home-Cleanliness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	22.1	22.1	22.1
	No	53	77.9	77.9	100.0
	Total	68	100.0	100.0	

AD School-Noise

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	10.3	10.3	10.3
	No	61	89.7	89.7	100.0
	Total	68	100.0	100.0	

AE School-Facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	32.4	32.4	32.4
	No	46	67.6	67.6	100.0
	Total	68	100.0	100.0	

AF School-Cleanliness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	60.3	60.3	60.3
	No	27	39.7	39.7	100.0
	Total	68	100.0	100.0	