

**POSTPARTUM DEPRESSION AND MATERNAL ADJUSTMENT:  
AN INVESTIGATION INTO SOME RISK FACTORS**



**Submitted in partial fulfilment of the requirements for the degree of  
M. Psych. in the Department of Psychology, University of the Western Cape.**

JUNE, 1994

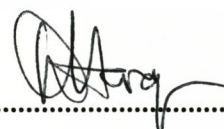
Dhaksha C. Hargovan

## DECLARATION

I declare that *Postpartum Depression and Maternal Adjustment: An Investigation into Some Risk factors* is my own work and that all the sources I have used or have quoted have been indicated and acknowledged by means of complete references.



UNIVERSITY of the  
WESTERN CAPE



.....  
Dhaksha C. Hargovan

# ACKNOWLEDGEMENTS

I wish to thank:

All the women who voluntarily participated in this study, and who were more than willing to maintain their co-operation during the second part of this investigation, despite the presence of their first born.

Professor N. Broekmann, my supervisor, for his skilled direction, consistent availability, support and encouragement.

Professor T. Pretorius, for his assistance with the statistical computations.

To the staff of the Mitchell's Plain Maternity and Obstetrics Unit, for their willingness to accommodate me into their busy schedules and allow the research to be conducted at their Unit.

I would also like to thank my friend Lester for teaching me how to use the complex typesetting computer programmes with which to complete this dissertation.

# TABLE OF CONTENTS

	Page
DECLARATION	i
ACKNOWLEDGEMENTS	ii
CHAPTER 1 INTRODUCTION	1
1.1 Rationale of this study	2
1.2 Aims of the study	4
CHAPTER 2 LITERATURE REVIEW	7
2.1 Postpartum Psychosis	7
2.2 Postpartum Blues	10
2.3 Postpartum Depression	12
2.3.1 Does Postpartum Depression Exist?	16
2.3.2 Incidence	20
2.3.3 Aetiology	24
2.3.4 Demographic Factors	25
2.3.5 Psychological Factors	29
2.3.6 Physiological Factors	31
2.3.7 Interpersonal Relationship: Social Support	31
2.3.8 Life Events	32
2.3.9 Maternal Adjustment and Attitude	34
2.4 Methodological Considerations	36
2.4.1 Sample Size	36

## TABLE OF CONTENTS (Contn'd.)

	Page
2.4.2 Retrospective Vs. Prospective Designs	36
2.4.3 Outcome Measures	38
2.4.4 Timing of Assessment	39
CHAPTER 3 METHODOLOGY	40
3.1 Methodological Considerations in this study	40
3.2 Hypotheses	41
3.3 Description of Research Design	45
3.4 Subjects	45
3.4.1 Selection Criteria	46
3.5 Psychometric Instruments	48
3.5.1 Biographical Information Sheet	49
3.5.2 The Beck Depression Inventory (BDI)	50
3.5.3 The Maternal Adjustment and Maternal Attitude Questionnaire (MAMA)	51
3.5.4 The Eysenck Personality Questionnaire (EPQ)	52
3.5.5 List of Threatening Life Events Questionnaire (LTE-Q)	54
3.5.6 The Social Support Questionnaire (SSQ)	55
3.6 Procedure	56

## TABLE OF CONTENTS (Contn'd.)

	Page
CHAPTER 4 RESULTS	59
4.1 Statistical Analyses	59
4.2 Depression	61
4.3 Maternal Adjustment and Attitude	62
4.3.1 Body Image	65
4.3.2 Somatic Symptoms	66
4.3.3 Attitude Toward Relationship	67
4.3.4 Attitude Toward Pregnancy and Birth	69
4.3.5 Attitude Toward Sex	71
4.4 Summary of Results in terms of Hypotheses	72
4.5 Personality	74
4.5.1 Depression	74
4.5.2 Maternal Adjustment and Attitude	76
4.6 Social Support	78
4.6.1 Depression	78
4.6.2 Maternal Adjustment and Attitude	81
4.7 Life Events	84
4.7.1 Depression	84
4.7.2 Maternal Adjustment and Attitude	86
4.8 Summary of Significant Findings	88

## TABLE OF CONTENTS (Contn'd.)

	Page
4.9 Multiple Regression	89
<b>CHAPTER 5 DISCUSSION OF RESULTS</b>	<b>91</b>
5.1 Introduction	91
5.2 Depression	92
5.3 Personality (neuroticism) and Levels of Depression	94
5.4 Social Support and Levels of Depression	95
5.5 Life Events and Levels of Depression	96
5.6 Summary of Results on Levels of Depression in Interaction with Risk Factors	97
5.7 Maternal Adjustment and Attitude	98
5.8 Personality (neuroticism) and Levels of Maternal Adjustment and Attitude	101
5.9 Social Support and Levels of Maternal Adjustment and Attitude	102
5.10 Life Events and Levels of Maternal Adjustment and Attitude	103
5.11 Social Identity Theory and Postpartum Adjustment	104
5.12 Methodological Issues	108
5.12.1 Sample Size	108
5.12.2 Instruments	108
5.12.3 Subjects	110

## TABLE OF CONTENTS (Contn'd)

	Page
5.13 Conclusion and Recommendations	110
CHAPTER 6 SUMMARY	112
REFERENCES	115
APPENDICES	125
APPENDIX A	125
APPENDIX B	126
APPENDIX C	140
APPENDIX D	153
APPENDIX E	160
APPENDIX F	163



UNIVERSITY *of the*  
WESTERN CAPE



# CHAPTER 1

## INTRODUCTION

It has been suggested that the time following childbirth is a period during which women are at higher than normal risk for depression (O'Hara, Neunaber & Zekoski, 1984). Despite considerable research on the subject of postpartum depression in the past decade, there is still considerable controversy about the relationship between postpartum and non postpartum depression (Whiffen, 1992) and in the definition of postpartum depression per se (Herzog & Detre, 1979; Hopkins, Marcus & Campbell, 1984; Whiffen, 1992).

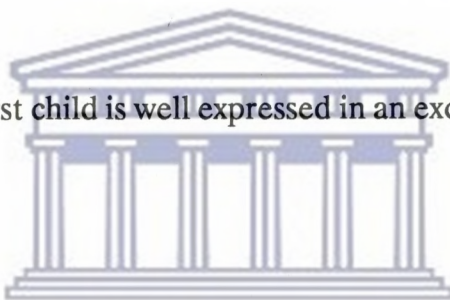
Aetiologically, postpartum depression is related to the same variables that predict non-postpartum depression (Whiffen, 1992). Empirical evidence on postpartum depression literature indicates that it is a multifactorial disorder, the risk for which is influenced by several risk factor domains. These risk factor domains include predisposing personality characteristics, physiological/biological characteristics, demographic factors, and psychosocial factors.

The birth of a first child is considered a life event that is powerful enough to induce a "crisis" (Rappoport, 1977). If one uses Erikson's (1968) description, of a crisis being a normative turning point and a period of increased vulnerability and heightened potential, this period, around the birth of the first child, is exactly that. Literature on the birth of the first child illustrates the acknowledgement of increased vulnerability at this time (Cobb, 1980; Breen, 1975; Grossman, Eichler, Winickoff, Anzalone, Gofseyer & Sargent, 1980).

In the light of this evidence, the question that arises is whether it is possible to identify primiparae (first time mothers) who are vulnerable to depression. In addition to this focus, is the consideration of maternal adjustment during the period following childbirth. Researchers have emphasized that the period after birth is particularly stressful, and there are some who have suggested that the common reactions to delivery, which involve maternal adjustment during the postpartum period, might in fact be mistaken for postpartum depression (Hopkins et al., 1984).

### 1.1. RATIONALE OF THIS STUDY

The experience of having a first child is well expressed in an excerpt from a novel by Nora Ephron, (1983, p. 158):



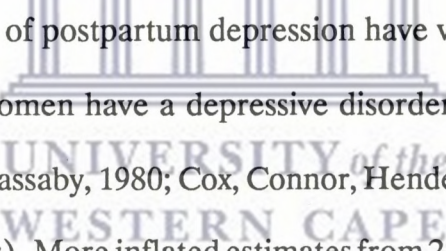
"After Sam was born, I remember thinking that no one had ever told me how much I would love my child; now of course, I realized something else no one tells you: that a child is a grenade. When you have a baby, you set off an explosion in your marriage, and when the dust settles, your marriage is different from what it was. Not better necessarily, not worse, necessarily, but different."

The above excerpt highlights the stress and adjustment in relation to having a first child. For a woman who is married, the question that arises then is, what is the predicament of the unmarried woman. Is she more vulnerable during this period compared to the married woman.

Three depressive psychiatric syndromes which may occur in the postpartum period are the postpartum psychosis, the transitory maternal blues, and the third syndrome of moderate

severity (Cox, 1992). The maternity blues syndrome and the postpartum psychosis are more readily detected (Pitt, 1982). It is the depression of moderate severity that is often overlooked. "Maternal depression often goes undetected and untreated. Many mothers struggle along in the first few postnatal months feeling that something is wrong but they don't really know what" (Chalmers, 1982, p.28).

For the clinician, the problem lies in distinguishing morbid mood disturbances requiring intervention, from those mood disturbances that are self-limiting, or associated with normal postpartum adjustment. Therefore knowledge of maternal adjustment in the postpartum period is considered to be imperative for understanding postpartum depression.



Although the incidence rates of postpartum depression have varied, several studies have found that at least 9 -13% women have a depressive disorder in the postpartum period (Paykel, Emms, Fletcher & Rassaby, 1980; Cox, Connor, Henderson, McGuire & Kendell, 1983; Kumar & Robson, 1984;). More inflated estimates from 25 -30% have been reported, but according to Cutrona (1982) these are a result of the functioning of differing diagnostic criteria.

According to Hopkins et al. (1984), the aetiology of postpartum depression remains unclear, and research is needed to clarify the relative contribution of the biological, psychological and social-psychological variables of the syndrome. A clear understanding of the causes of and the risk for high levels of depressive symptomatology in the postpartum period would provide invaluable treatment directives.

## 1.2. AIMS OF THE STUDY

Given that the particularly stressful time that follows childbirth leaves some women more vulnerable to severe emotional distress which may merge into a psychiatric disorder, the present study aims to focus on vulnerability profiles of the unmarried and married primiparae.

The goal of this study is to gain insight into the etiological factors influencing levels of depression and maternal adjustment and attitude in the postpartum period. Specifically, the aim of this study is to focus on levels of depression; maternal adjustment and attitude in association with personality (neuroticism), social support and life events as risk factors in the postpartum period.

Previous researchers have not focused on the interaction between life events, social support, personality characteristics and marital status in primiparae and the risk of depression and quality of maternal adjustment in the postpartum period.

The study will attempt to answer the following questions in the primiparae:

1. Do adverse life events predict poor maternal attitude and adjustment and severity of postpartum depression?
2. Does personality (neuroticism) predict the degree of maternal adjustment and attitude and postpartum depression?

3. Does poor social support predict poor maternal attitude and adjustment and severity of postpartum depression?
4. How is marital status associated with maternal attitude and adjustment and severity of postpartum depression?
5. How do personality characteristics, adverse life events, social support and marital status interact with maternal adjustment and attitude and the severity of depression?

The present study will focus on primiparae in the Mitchells Plain community. It should be borne in mind that research on postpartum depression has taken place in different countries of the world, and thus in different sociocultural settings. The importance of this, particularly in the light of the fact that very little research has been done on the present community, will become evident in the literature review. Chapter 2 discusses the postpartum psychiatric disorders that have been identified by researchers. Postpartum depression literature is reviewed, and controversies about the existence of a distinct postpartum depression syndrome are raised. This is followed by a discussion of aetiological factors and a discussion of the incidence of postpartum depression. The chapter ends by examining methodological considerations that may explain some of the controversial issues evident in postpartum depression literature.

Chapter 3 begins with a brief discussion of the methodological considerations raised in the previous chapter that are relevant to this study. This is followed by the hypotheses that inform this study. A description of the methodology and psychometric instruments used

in the current study are presented and the chapter continues with a description of the procedure followed.

Chapter 4 presents the results obtained in this study. This chapter includes a discussion of the statistical analyses conducted in this study and summarizes the results in terms of the hypotheses.

A discussion of the results obtained follows in chapter 5. The methodological issues raised in chapter 2 and 3 are followed through and discussed in relation to this study. The chapter ends with conclusions drawn in this study and recommendations for future research are given.

Chapter 6 provides a summary of this study and includes the significant findings.

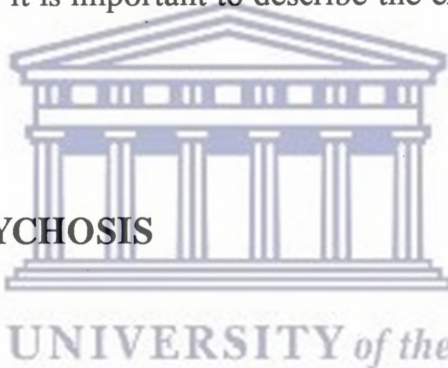


# CHAPTER 2

## LITERATURE REVIEW

The postpartum psychiatric disorder can be divided into three major categories vis. postpartum psychosis at one extreme of severity; the postpartum blues at the other extreme of severity and the postpartum depression extending between these two extremes. The three syndromes of postpartum psychiatric disorder that have been identified by researchers, are not included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-111-R) (American Psychiatric Association, 1987). While it is the postpartum depression that concerns us in this study it is important to describe the extremes in order to set the syndrome in context.

### 2.1. POSTPARTUM PSYCHOSIS



The most severe syndrome is postpartum psychosis. Postpartum depressive psychosis occurs in one to two per 1000 deliveries (Herzog & Detre, 1976; Kaplan & Sadock, 1991). The risk of a postpartum psychosis is increased if there has been a previous postpartum psychiatric illness, or if there is a history of a mood disorder in the individual or family. According to Kaplan and Sadock (1991), the most common aetiological factor of postpartum psychoses is the existence of an underlying mental illness, usually associated with bipolar disorder, less commonly associated with schizophrenia.

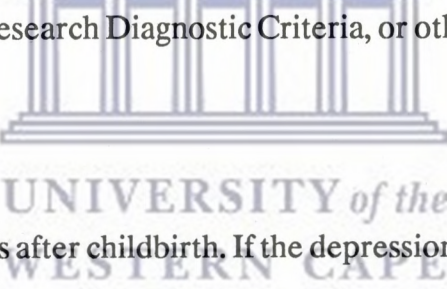
Brockington and Roper (1988) suggest that although this syndrome is linked to a precisely timed event, there are still problems with its definition and that it has often been defined

too broadly. The aforementioned authors discuss in detail the nosology of postpartum psychosis, and emphasize that research evidence supports the classification of postpartum psychosis with other bipolar disorders such as manic depression and cyclothymic disorder.

The following criteria are proposed for a postpartum psychosis:

Patients meeting RDC (Research Diagnostic Criteria, Spitzer, Endicott & Robins, 1978) for mania, schizoaffective mania, schizophrenia or undiagnosed functional psychosis beginning within two weeks of childbirth, irrespective of social circumstances. Exclude patients who manifested similar symptoms during the ninth month of pregnancy, but include patients who suffer from depression or neurotic symptoms before delivery (Brockington & Roper, 1988, p.7).

Thus the postpartum depressive psychosis is defined as:

- 
1. Depression meeting Research Diagnostic Criteria, or other widely used criteria, for major depression.
  2. Onset in first two weeks after childbirth. If the depression started a longer time after delivery, the word 'probable' should be added to the diagnosis.
  3. Presence of delusions, hallucinations or confusion (Cox, 1992).

Herzog and Detre (1976) describe some qualitative differences between the postpartum depressive psychoses compared to the non-postpartum depressive psychoses. The delusional content of postpartum depression reflects common themes associated with childbirth and related conflicts. For example, guilt feelings resulting from infanticidal thoughts



are common. Cox (1986) discusses five important symptoms that apply to the diagnosis of postpartum psychosis. They are:

1. **Insomnia:** This is one of the most important symptoms of a postpartum psychosis. The disturbance in sleep cannot be accounted for by extrinsic or environmental factors for example a difficult, crying baby. Although insomnia may persist through the night, early morning waking is typical of a depressive postpartum psychosis.
2. **Mood disturbance:** Lability of mood is typically characteristic of the early stages of a postpartum psychosis. This includes an inability to provide adequate care for the baby, for example carelessness in handling baby, marked distress about poor ability to concentrate and perplexity about thoughts that are not clear.
3. **Unusual behaviour:** Behaviour that is not consistent with the personality of the mother or with the demands of the postnatal ward, can be considered an indicator of postpartum psychosis.
4. **Unusual beliefs:** Delusions are present in most cases of postpartum psychosis. Delusions of guilt, for instance, being a bad mother, are common in postpartum psychosis.

Whilst the above symptoms are useful indicators of the existence of a postpartum psychosis, Brockington and Roper (1988) suggest that further clinical studies are required to improve the present classification and diagnosis. "As far as puerperal psychosis is concerned, it is unsatisfactory that definitions.....are stated mainly in terms of background factors (personality and stress, history and timing), and that clinical features hardly enter into the classification, except to distinguish between depressed and psychotic patients" (p.14).

## 2.2. POSTPARTUM BLUES

The least severe syndrome is the postpartum blues which is described as a brief, benign, and a 'non serious' problem in clinical practice (Pitt, 1973; Cox, 1986; Kennerly & Gath, 1989). Estimates of the frequency of the blues have ranged widely from 33% to 70%, depending on the diagnostic criteria used (Kennerly & Gath, 1989). According to Cox (1986) although postpartum blues are self limiting, the disturbance may merge into a more prolonged postpartum depressive illness.

There is conflicting evidence about the aetiological association between previous psychiatric history and postpartum blues (Kennerly & Gath, 1989). There is more agreement, however, about the postpartum blues in relation to poor social adjustment as well as poor family and/or marital relationship than in relation to prior psychiatric history (Ballinger, Buckley, Naylor & Stansfield, 1979; Cutrona, 1983; Kennerly & Gath, 1989).

The fact that the postpartum blues peaks on about the third or fourth post-natal day is the most distinctive feature of this syndrome (Pitt, 1973; Cutrona, 1982; Cox, 1986). The

symptoms decline rapidly after onset and disappear before the tenth day. In their study on the detection and measurement of postpartum blues, Kennerly and Gath (1989) developed a questionnaire which employed three scales that had previously been devised by Pitt, 1973; Stein, 1980; Kendell, Mackenzie, West, McGuire and Cox, 1981. Kennerly and Gath (1989) validated the following clusters for detecting the existence of postpartum blues:

1. Primary blues: This refers to feeling 'low spirited'.
2. Decreased alertness
3. Hypersensitivity
4. Decreased self-confidence
5. Depression
6. Despondency
7. Reservation



This study found a lack of any association between the blues and any earlier history of psychiatric disorder. The blues were not related to previous psychiatric disorder, whether puerperal or non-puerperal. This study does not, however, indicate whether women with postpartum blues subsequently develop postpartum depression and consequently whether the postpartum blues is a separate category or whether it is a point on a continuum of increasing severity. There is evidence to suggest that women with postpartum blues do subsequently develop postpartum depression. Several studies (Paykel et al., 1980; Kendell et al., 1981; Cox, Connor & Kendell, 1982; Hapgood, Elkind, & Wright, 1988) have found that women with postpartum blues evolve a postpartum depression. This adds credence to the argument advanced by O'Hara, Schlechte, Lewis and Varner (1991) that the postpartum blues are a variant of an affective disorder.

This latter finding was refuted by Kennerly and Gath (1989) who found that the characteristic depression of maternity blues was questionable. Implicit in the latter finding is the argument that postpartum blues is considered a transient mood disturbance as a normal concomitant of postpartum adjustment, because the majority of women experience the blues. These findings mentioned above highlight the controversial nature of the postpartum blues syndrome and the problems regarding classification of the syndrome.

### **2.3. POSTPARTUM DEPRESSION**

The third syndrome, a non-psychotic postpartum depression, is of moderate severity (Paykel et al., 1980; Cutrona, 1982; Sharp, 1992). Postpartum depression in the absence of psychotic features is a disorder that is comparable to a major or minor depressive episode as defined by Research Diagnostic Criteria (Spitzer et al., 1978), or the Diagnostic and Statistical Manual of Mental Disorders (DSM-111-R) (American Psychiatric Association, 1987) (Cutrona, 1982; Kumar & Robson, 1984; O'Hara & Zekoski, 1988).

There is a growing consensus in the literature, which limits postpartum depression to a mood syndrome that arises within 6 months after childbirth (Cutrona, 1983). Studies that have monitored the course of postpartum depression, have been consistent in reporting that postpartum depression abates within 6 months and typically remits fully within a year (Pitt, 1968; Nilsson & Almgren, 1970; Kumar & Robson, 1978; O'Hara, Rehm & Campbell, 1982; Kumar & Robson, 1984; Hayworth, Little, Carter, Raptopoulos, Priest & Sandler, 1980). There was however, one study conducted by Wrate, Rooney, Thomas and Cox in 1985 which found that symptoms of depression persisted for as long as three years. A major

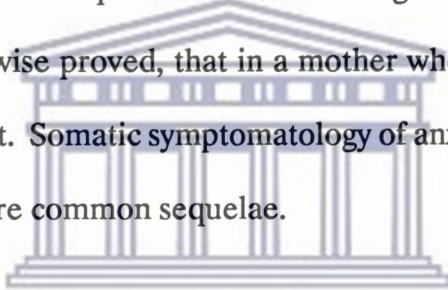
methodological shortcoming of this study was that no diagnostic interviews were conducted. The study was based on retrospective recall of depressive episodes, which is an unreliable method of collecting data. Thus the conclusions in this study are questionable.

The diagnostic criteria for postpartum depression vary (Watson Elliot, Rugg & Brough, 1984; Hopkins et al., 1984; Whiffen, 1993). Pitt, in his early work in 1968, described postpartum depression as 'atypical', and as distinct from the classical depressive illness. In this study Pitt compared postpartum depressed and non depressed postpartum women. These women were interviewed in the third trimester of pregnancy and again at six to eight weeks postpartum. The specific features that contrasted with the non depressed women were: mood worsening in the morning rather than the evening, (initial) insomnia, tearfulness, despondency, labile mood, and feelings of inadequacy and inability to cope, particularly with the baby. An important feature noted was that depression was always accompanied by anxiety about the baby or about hypochondriacal concerns. Although the conclusions drawn in this founding work on postpartum depression are tenuous because of the lack of the use of a standardized rating of depression, it does, however, lend credence to the fact that postpartum depression may extend during the first year postpartum. The second major shortcoming of this study was that it did not control for a non -postpartum depressed group, thus the conclusion that postpartum depression is a distinct or 'atypical' syndrome is based on tenuous grounds. This debate about the distinct nature of the postpartum syndrome will be discussed in the next section.

To return to the symptomatology of postpartum depression, the clinical presentation of postpartum depression has been summarized by Cox (1986):

1. Depressed mood subjectively experienced by women, or as established from an objective observation of the mother's facial expression, including evidence of tearfulness and or emotional lability.
2. Sleep disturbance is considered an important symptom of postpartum depression. The irregularity of sleep is not to be misinterpreted with the irregularity of sleep caused by a crying baby. There may also be complaints of consistent daytime fatigue, and the subsequent need to go to bed to avoid company and to rest.
3. Ideas of not coping, self blame and guilt, as a result of the lowering of the mother's self-esteem consequent to the existence of a depressive illness, are common. The depression may well impair the mother's ability to cope, increasing feelings of guilt and incompetence, resulting in a vicious cycle of depressive symptomatology establishing itself. The fact that many mothers who are depressed are still able to maintain breast-feeding and routine baby care, is often a 'masking' factor in the diagnosis of postpartum depression. This may suggest that the attitude and adjustment of the mother to her new role is what masks depression.
4. Thoughts of self harm, or harming the baby. According to Cox, (1986) fleeting thoughts of self harm without specific plans in the absence of severe depression are common, and do not carry a high risk of suicide being attempted. The presence of severe depression and suicidal ideation should be thoroughly investigated, however, with regard to persistence of ideation, formulated plan, and or past history of impulsive behaviour.

5. Physical and/or emotional rejection of the infant, are frequent features of postpartum depression. In physical rejection, the mother may refuse to handle the baby or carry out child care tasks. In emotional rejection the mother articulates the fact that she has no feelings toward the baby, or questions her bond, or in extreme cases thinks the baby is not hers.
6. Postpartum depression is one of the most important causes of loss of libido in the postpartum period.
7. Anxiety often accompanies depression and according to Cox (1986), it is important to assume, until otherwise proved, that in a mother who exhibits anxiety, there is also depression present. Somatic symptomatology of anxiety, for example, palpitations and headaches, are common sequelae.



UNIVERSITY of the  
WESTERN CAPE

It is important to stress the fact that the depressive symptoms as described above are coloured in their presentation by the mother's relationship to the baby (Spangenberg & Pieters, 1990). According to Cox (1986) any mother who has a marked depressed mood and at least two symptoms present for at least two weeks, can be diagnosed with a mild depressive illness. If there are five or more symptoms present, it is diagnosed as a major depression requiring treatment.

### 2.3.1. DOES POSTPARTUM DEPRESSION EXIST?

There is support for the view that postpartum depression is mild, meeting the diagnosis for a minor depressive episode (Pitt, 1968; Elliot et al., 1983; Kumar & Robson, 1984; O'Hara, Zekoski, Phillips & Wright, 1990; Whiffen, 1988). Whiffen (1992), in her review of postpartum depression literature, makes the point that if severity is the only distinguishing feature between postpartum depression and non - postpartum depression, then postpartum depression is better conceptualized as an adjustment disorder. She raises the following controversial issues about the existence of a distinct postpartum depression syndrome:

Whiffen (1992) continues that there is no consensus amongst postpartum depression researchers on whether postpartum depression is a distinct diagnosis. Citing the work of Watson et al. (1984), she bases this argument on the fact that many researchers have concluded that there is a continuity between the depression experienced in the postpartum period and 'other' depressions.

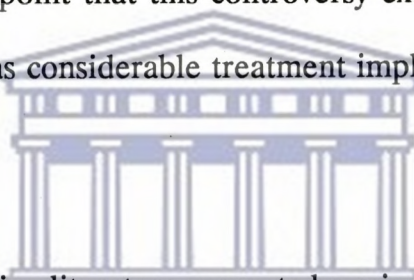
Whilst there is no consensus about a distinct diagnosis, the fact that women who were previously emotionally stable are at elevated risk for depression in the postpartum period needs to be borne in mind (Pitt, 1968; Blair, Gilmore, Playfair, Tisdall & O'Shea, 1970; Dalton, 1971; Kumar & Robson, 1984).

Whiffen (1992) goes further to suggest that due to the fact that there has been no consensus amongst researchers, this has given rise to researchers investigating aetiological models that are based on general depression literature. In raising this issue Whiffen is raising



important methodological considerations in postpartum depression research. The overall result, according to her, is one of greater confusion because different aetiological variables have been investigated in order to validate the existence of a distinct postpartum depression syndrome. What Whiffen (1992) is suggesting is that if postpartum depression is distinct, then it should be related aetiologicaly to a specific variable related to childbirth, a variable that is not present in the development of non - postpartum depression. In this regard, there has been a lack of empirical work that has investigated and directly focused on the differences between postpartum depression and non - postpartum depression.

Whiffen (1992) highlights the point that this controversy extends beyond the realm of academics and research and has considerable treatment implications. She states in this regard:



The postpartum depression literature seems to be reinventing the wheel, as well-accepted global hypotheses about depression are tested in childbearing samples. Similarly, if one believes that biological factors specific to childbirth cause postpartum depression, then there is no reason to think that psychological or standard pharmacological treatments will be effective. Cognitive therapy is well known to be an effective treatment for depression (Dobson, 1989). Yet, not one of the papers published in the past decade suggested that cognitive therapy might be efficacious in the treatment of postpartum depression. Similarly, not a single, controlled study was conducted that assessed the efficacy of antidepressants. (p. 486)

Postpartum depression is not represented in the DSM-111-R, and the above argument may suggest that it is not regarded as a discrete entity. There is, however, an aspect regarding this issue which must be considered. With regard to other pathologies such as the Borderline Personality Disorder, the DSM-111-R has been criticized for the following reasons:

1. It focuses on discrete absolute characteristics (Goldstein, 1990).
2. It is not adequately clinically based (Goldstein, 1990).
3. Many clinicians have criticized its neglect of developmental grounding and lack of clinical utility (Gunderson, 1987; Kernberg, 1984).

These criticisms, if applied to postpartum depression, would also suggest that the current absence in the DSM-111-R may be a result of the way the DSM-111-R is structured. Furthermore, as a result of pressure from clinicians, the inclusion of the Borderline Personality syndrome took place some 40 years after it was first established (Goldstein, 1990).

It is possible that postpartum depression, like the Borderline Personality Disorder before 1980, is similarly in the early phases of description, requiring much clarification both clinically and methodologically.

The period of pregnancy for women is undoubtedly a time of emotional disequilibrium (Pitt, 1968; Dalton, 1971; Brown & Shereshfsky, 1973; Braverman & Roux, 1978; Paykel et al., 1980; Cox, 1982; Kumar & Robson, 1984). Women experience many physical and psychological changes during pregnancy including morning sickness, fatigue, dropping out of the work force, and other life style changes.

In a descriptive study on the period following childbirth Leifer (1977) investigated the intrapsychic changes that occur during the first pregnancy and the early months of motherhood. Using a sample of 19 primigravidas (first time mothers), Leifer reported on five major areas of change in affective life commonly experienced during pregnancy. These

are: an increase in anxiety, increased self-preoccupation and a corresponding decline of emotional investment in the external world; intensified need for succourance; increased emotional lability; and finally, despite the increase in psychological stress, an intensified sense of well-being.

It is the paradoxical coexistence of so many opposing and contradictory feelings that is a significant aspect of the transition to parenthood. In the same study, the postpartum period was found by Leifer (1977) to be characterized by the paradox of euphoria and elation, strongly predominant in the very early life of the baby, and depression and anxiety, that began to set in later. Satisfaction and accomplishment alternated with feelings of depression, isolation, dissatisfaction and boredom with the child caring activities. Interestingly, Leifer found in her group that for most women, the early phases of parenthood were experienced as a period of crisis, frequently exceeding that of pregnancy.

It is apparent from the above discussion that pregnancy is a time of 'preparation' for parenthood, and the postpartum period involves a complex process of preparation at the psychological and physical level, Erikson (1968, p.57) describes this very succinctly:

a baby's presence exerts a consistent and persistent domination over the outer and inner lives of every member of a household. Because these members must reorient themselves to accommodate his presence, they must also grow as individuals and as a group. It is as true to say that babies control and bring up their families as it is to say the converse. A family can bring up a baby only by being brought up by him. His growth consists of a series of challenges to them to serve his newly developing potentialities for social interaction.

The present research does not attempt to resolve the controversy relating to the question of the existence of postpartum depression, but notes the sequelae of childbirth. The present research will focus on the notion that postpartum depression is a continuum encompassing the three conditions discussed in this chapter. It is assumed for the purposes of parsimony that the central point of the continuum is the moderate to severe mood disturbance. This entity will become the focus of the following review.

### 2.3.2. INCIDENCE

The range of methods that investigators have used to establish the existence of depressive symptoms in the postpartum period, have included:

1. A history of medical treatment. This refers to women who seek treatment from a general practitioner or a psychiatrist.
2. Self-report measures or questionnaires, visual-analogue self-rating scales, Zung Depression Scale (Zung, 1965) General Health Questionnaire (GHQ) (Goldberg, 1972); Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock & Erbaugh, 1961), Edinburgh Postnatal Screening Device (EPSD) (Cox, Holden & Sagovsky, 1987).
3. Standardized assessment and diagnostic systems, questionnaires and interviews. RDC (Spitzer et al., 1978), DSM-111-R, ICD-9 (World Health Organization, 1980) criteria and the Present State Examination (Goldberg, 1972; Rutter, 1976).
4. Multiple assessment strategies. This refers to a combination of two or more of the strategies mentioned above.

Comprehensive reviews have differed with respect to reporting the prevalence and incidence of postpartum depression . See Tables 1.1, 1.2 and 1.3 below from O'Hara and Zekoski (1988) and Whiffen (1992).

**Table 1.1** Incidence and prevalence of prenatal and postnatal depression: Studies using conventionally defined diagnostic criteria.

Study	Sample size and country of investigation	Prenatal incidence/prevalence (time of assessment)	Postnatal incidence/prevalence (time of assessment)	Criteria
Pitt (1968) Neugebauer (1983)	305 UK	— -10.8% -19.7% (6-8 weeks)		Depressive symptoms that develop since delivery lasting longer than two weeks, unusual in experience and to some degree disabling
Martin (1977)	401 Ireland	-23% (time frame unspecified)	14.0%/23% (5-6 weeks)	Pitt (1968) criteria
Wolkind et al. (1980)	117 UK	-16% (7th month) <sup>c</sup>	-10% (4 months) <sup>b</sup> -18% (14 months) <sup>b</sup>	Definite psychiatric disorder (mostly depression assessed in context of modified Present State Examination) (Rutter, 1976)
Cox et al. (1983)	105 Scotland	-4% (20 weeks) <sup>c</sup>	-13% (4 months)	Pitt (1968) criteria assessed in context Goldberg interview (Goldberg et al., 1970)
Nott (1982)	5200 UK	-0.21% (entire Pregnancy)	-0.27% (9 months)	Depressive neurosis assessed in context of inpatient or outpatient psychiatric care.
Cox (1983)	183 Uganda	—	-10% (3 months)	Depressive illness based on ICD-8 assessed in context of Goldberg interviews
Cutrona (1983)	85 USA	-3.5% (3rd trimester) <sup>c</sup>	7%/4% (2weeks) <sup>c</sup> 3.5%/3.5% (8weeks) <sup>c</sup> 8.2%/8.2%(comined)	DSM-III (American Psychiatric Association 1980); major depression.
Kumar and Robson (1984)	119 UK	12%/13% (1st trimester) 2.5% 17.6% (2nd trimester) 2.7% 6.3% (3rd trimester)	14%/14.9% (3months) <sup>c</sup> 4.5%/11.2% (6 months) <sup>c</sup> 4.6%/6.5% (12 months) <sup>c</sup>	Research Diagnostic Criteria (RCD) (Spitzer et al., 1978) major and minor depression in context of Goldberg interviews.
O'Hara et al. (1984)	99 USA	-90% (2nd trimester)	10%/12.0% (9weeks)	RCD major and minor depression assessed in context of modified Schedule for Affective Disorders and Schizophrenia (Endicott & Spitzer, 1978)
Watson et al. (1984)	128 UK	-9.4%(entire pregnancy)	7.8%/12.0% (6 weeks) —/22.0% (entire postnatal year)	Neurotic depression as defined by ICD-9 assessed in the context of Goldberg interviews.

<sup>a</sup> Period of coverage of assessment is entire pregnancy up to time of assessment or entire postpartum period up to time of assessment unless otherwise noted

<sup>b</sup> Period of coverage is the previous 30 days

<sup>c</sup> Period of coverage is the previous 7 days

From O'Hara and Zekoski (1988, pp. 28-29).

**Table 1.2** Prevalence of prenatal and postnatal depression: Estimates not based on psychiatric diagnosis

Study	Sample size and country of investigation	Prenatal incidence/prevalence (time of assessment)	Postnatal incidence/prevalence (time of assessment)	Criteria
Gordon and Gordon (1959)	98 Usa	—	16% slight emotional upset 13% much emotional upset (4 months)	Obstetrician rating regarding amount of postpartum emotional upset (3-point scale).
Ryle (1961)	137(313 full-term Pregnancies) UK	26% (entire Pregnancy)	4.8% (within one year)	Disorder necessitating at least three consultations with the investigator (GP); neurotic and endogenous depression.
Tod (1964)	700 UK	—	2.9% (possibly up to a year)	Serious depression (no other criteria).
Gordon et al., (1965)	306 USA	—	30% (6 weeks) 11% (6 months)	Obstetrician rating on a 5-point scale; at least mild level of emotional upset.
Nilsson (1970)	152 Sweden	27.6% Moderate symptoms 17.1% pronounced symptoms (entire Pregnancy)	26.3% moderate symptoms 19.1% pronounced symptoms (6months)	Moderate symptoms affecting subject's wellbeing; pronounced psychiatric symptoms indicating clear mental disturbance.
Dalton (1971)	189 UK	—	% depression 7 25.4% mild depression (6 months)	Depression requiring treatment; mild depression (no criteria).
Brown and Shereshefsky (1973) <sup>a</sup>	—	—	4.8% (6 months) <sup>a</sup>	Psychiatric disorder requiring treatment.
Uddenberg (1974)	95 Sweden	21.8% moderate mental handicap. 16.8% severe mental handicap (17 weeks)	27.4% moderate mental handicap 20.0% severe mental handicap (4 months)	Moderate mental handicap were symptoms resulting in mild deterioration in social and interpersonal relationships; severe mental handicap reflected by symptoms resulting in significant deterioration in social and interpersonal functioning.
Braverman and Roux (1978)	120 Canada	—	2.5% mild to moderate 0.0% moderate to severe 0.8% very severe (6 weeks)	Mild to moderate emotional reaction: more complaints than average: moderate to severe emotional reaction: overt sign of persistent depression such as sad expression; frequent crying; very severe depression requiring psychiatric consultation.
Oakley (1980)	55 UK	—	24% (5 months)	Presence of two or more symptoms lasting two or more weeks.
Paykel et al., (1980)	120 UK	—	20% (5-8 weeks)	Score greater than 6 on Raskin Three Area Depression Scale (Raskin et al., 1970)

For many women more than one pregnancy was represented in the sample. <sup>a</sup> Incidence.

From O'Hara and Zekoski (1988, pp. 26-27).

**Table 1.3** Studies assessing the prevalence of pregnancy and postpartum depression

	N	Postpartum Major Depression		Postpartum Minor Depression		Pregnancy and Postpartum Depression
		N	(%)	N	(%)	N (% overlap)
<b>DSM-III Criteria</b>						
Cutrona (1983)						
Saks, Frank, Lowe, Berman, Naftolin, & Cohen (1985)	85	3	(3.5)			1 (33)
Subtotals	20	2	(10.0)			
	105	5	(4.8)			
<b>RDC</b>						
Kumar & Robson (1984) <sup>a</sup>	114	5	(4.4)	11	(9.6)	4 (25)
O'Hara, Neunaber, & Zekoski (1984)	99	8	(8.1)	4	(4.0)	2 (17)
O'Hara, Zekoski, Philipps, & Wright (1990)	182	8	(4.4)	11	(6.0)	3 (16)
Whiffen (1988a)	120	9	(7.5)	12	(10.0)	
Subtotals	515	30	(5.8)	38	(7.4)	
<b>ICD 9</b>						
Watson, Elliott, Rugg, & Brough (1984)	128	15	(11.7)			5 (33)
<b>PSE</b>						
Martin, Brown, Goldberg, & Brokington (1989) <sup>b</sup>	78	10	(12.8)			6 (60)

Note. DSM-III = Diagnostic and Statistical Manual (3rd ed.), RDC = Research Diagnostic Criteria, ICD 9 = International Classification of Disorders, version 9, PSE = Present State Examination.

<sup>a</sup> Three cases of "intermittent depression" were excluded. <sup>b</sup> Diagnoses were made retrospectively

From Whiffen, (1992, p. 495)

Whiffen (1992), in establishing the prevalence of postpartum depression as seen in Table 1.3 of this text, selected published studies that met certain criteria. Studies must have used standardized assessment and diagnostic strategies. Subjects had to be obtained from unselected samples of childbearing women, the rationale being that if women are chosen on the basis of self-report measures, the outcome measure of diagnosable depression is unreliable. The postpartum interview had to be conducted between 4 and 12 weeks after delivery, to control for emotional instability experienced up to 2 weeks after delivery.

As is evident, research on postpartum depression has been characterized by a lack of standardized assessment strategies for diagnosing depression which has resulted in little consensus regarding the prevalence and incidence of postpartum depression (Hopkins et al., 1984; O'Hara & Zekoski, 1988; Whiffen, 1992). It is important to bear in mind that despite the range of assessment strategies involved in postpartum depression research, a unifying element of investigative studies in this area is the fact that a diagnostic judgement is made regarding the presence or absence of postpartum depression.

### 2.3.3. AETIOLOGY

A number of biological, psychological, and social-psychological factors have been postulated as significant variables influencing the aetiology of postpartum depression. Although a number of potential aetiological factors have been implicated in the development of postpartum depression, research in this area has not produced any clear consensus. This section therefore will discuss aetiological factors related to postpartum depression which are relevant to this study.

Before proceeding to a discussion of the aetiology of postpartum depression, it is important to note that the postpartum syndrome must be viewed within the context of the major methodological and conceptual issue surrounding this field, namely, whether the postpartum psychiatric disorder is an entity distinct from depression as it is already described in the DSM-111-R. In other words, is it necessary to describe the postpartum disorder as a



separate syndrome causatively linked to the postnatal situation or is it a depression linked to the postnatal situation ? This distinction is of crucial importance because the causal link implies an aetiology that is significantly related to childbirth.

Although there have been many demographic or background factors that have been investigated in association with postpartum depression, only a few studies have shown an association with postpartum depression. The first part of this section will discuss the investigations that have focused on demographic factors in association with postpartum depression.

## 2.3.4. DEMOGRAPHIC FACTORS

### 2.3.4.1. AGE:

There is no clear evidence of a high risk age group for the development of postpartum depression. Several studies undertaken have compared non - depressed postpartum women with depressed postpartum women. These studies have consistently found no relationship between age and postpartum depression (Blair et al., 1970; Braverman & Roux, 1978; O'Hara, 1980; Spangenberg & Pieters, 1991). Four studies (Hayworth et al., 1980; Paykel et al., 1980; Feggetter & Gath, 1981; O'Hara, Neunaber & Zekoski, 1984) have found that younger women were more at risk. In contrast, one study found that older primiparae were more at risk (Kumar & Robson, 1984).

#### 2.3.4.2. PARITY:

For primiparae (first time mothers) the demands of motherhood may be quite novel, which means that they possibly experience increased levels of stress which would make them more vulnerable to depression. This same argument could apply to the multiparous women who might experience greater demands to cope with a newborn as well as young children, thus making them more vulnerable to depression and increased levels of stress. Evidence regarding the relationship between parity and postpartum depression is inconsistent and contradictory. A significant relationship between parity and postpartum depression has been found in 6 of 18 studies (O'Hara & Zekoski, 1988). In three studies lower parity was associated with higher levels of postpartum depression, and in three studies higher parity has been associated with higher levels of depression (O'Hara & Zekoski, 1988).

Two studies by Kumar and Robson (1984) and Pitt (1968) confirm the finding that primiparae were more likely than others to develop depression. Other studies by Martin (1977) and Todd and Edin (1964) found depression less likely among primiparae. Bebbington, Dean, Der, Hurry and Tennant (1991) found that rates of depression were higher in married parous women than in the non-parous women, whose rates were similar to those of men.

#### 2.3.4.3. SOCIO-ECONOMIC STATUS:

There have been 13 reported studies on the relation between postpartum depression and socio-economic status (O'Hara & Zekoski, 1988), only two studies reported a significant association (Feggether & Gath, 1981; Playfair & Gowers, 1981).

In these two studies, higher socio-economic status was associated with lower levels of depression after delivery. This is consistent with non-postpartum depression research which shows a higher prevalence of depression among lower socio-economic groups (Brown & Harris, 1978) .

18

#### 2.3.4.4. MARITAL STATUS:

Marital status was found to be significantly associated with postpartum depression in 1 of 12 studies where it was investigated (Feggetter & Gath, 1981). In that study being unmarried was associated with a higher risk of depression. Marital status and a history of general practitioner contact for psychiatric symptoms, were the only risk factors that were considered in that study. What is evident in the research focusing on marital status is the wide range of depression assessment methods and the lack of consistency in measuring depression.

Of note, is that researchers have not specified whether or not the unmarried women in their respective samples were in a relationship. Assuming that some of the unmarried women were in a relationship, this would raise important methodological issues, which appear not to have been controlled for. One of these issues, is whether a relationship per se acts as an intervening variable which affects levels of postpartum depression in the same way that marriage does. This possibility may account for the low incidence of investigations which have found marital status to be significantly associated with postpartum depression.

Furthermore researchers have not investigated whether marriage, as a legal and social institution, has a significant effect on levels of postpartum depression as opposed to being unmarried but in a relationship during the pre- and post-partum periods.

#### **2.3.4.5. PREVIOUS PSYCHIATRIC HISTORY:**

The majority of the studies on postpartum depression have found that there is an association between women who have experienced a previous non postpartum psychiatric disorder (often depression) and postpartum depression (Todd & Edin, 1964; Nilsson & Almgren, 1970; Zajicek & Wolkind, 1978; Ballinger et al., 1979; O'Hara, 1980; Paykel et al., 1980; Watson, 1984; O'Hara et al., 1991). Three studies failed to find an association between postpartum depression and psychiatric history (Pitt, 1968; Dalton, 1971; Kumar & Robson, 1984).

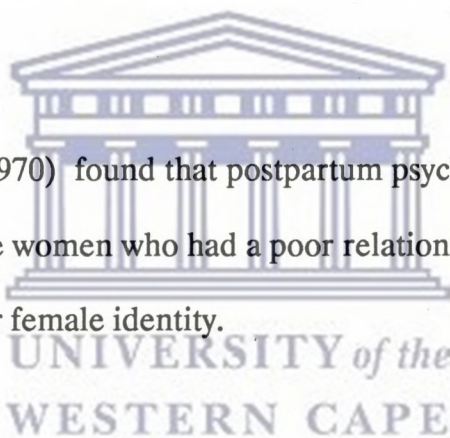
Wolkind, Zajicek, and Ghodsian (1980) assessed psychiatric risk in a sample of primiparous women during pregnancy and at several stages after the birth of the child. It is interesting to note that they identified a subgroup of women who developed postpartum depression in the absence of a psychiatric history. This study highlights the fact that the postpartum period is a time of high vulnerability for depression.

## 2.3.5. PSYCHOLOGICAL FACTORS

### 2.3.5.1. PSYCHODYNAMIC FACTORS:

There are theories of postpartum depression that have been psychoanalytically derived. For instance, Wolkind et al. (1976,1980) have provided research evidence of a positive association between psychodynamic theories and postpartum depression. They found that mothers who were themselves deprived of attention in childhood had greater difficulty in accepting their maternal role, and were more often depressed. This latter finding has been confirmed by Gotlib, Whiffen, Wallace and Mount (1991).

Nilsson & Almgren (1970) found that postpartum psychiatric disorders are more likely to occur to those women who had a poor relationship with their mothers or were uncertain of their female identity.



### 2.3.5.2. PERSONALITY:

A number of investigators have examined the relationship between personality traits and an increased vulnerability to depression (Akiskal, Bitar, Puzantian, Rosenthal & Walter, 1983; Hirschfeld, Klerman, Clayton, Keller, McDonald-Scott & Larkin, 1983). Several personality traits have been found to be related to an increased vulnerability to depression, including dependency (Hirschfeld et al., 1983; Birtchnell, 1984), orality (Chodoff, 1972), neuroticism (Coppen & Metcalfe, 1965; Hirschfeld & Cross, 1987) and a dysfunctional cognitive style (Abramson, Seligman & Teasdale, 1978). Watson et al. (1984), using the Eysenck Personality Inventory

(EPI), found a significant relationship between high scores on neuroticism in women and the development of postpartum depression. The focus of that study was on the incidence of psychiatric disorder during pregnancy. Kumar and Robson (1984) found high neuroticism to be associated with antenatal depression, but not postnatal depression. Boyce, Parker, Barnett, Cooney and Smith (1991) found neuroticism (using the EPI) to be a predictor of postpartum depression in primiparae who were in a stable adult relationship.


From the research evidence, it would seem that personality is related to postpartum depression and that personality factors put women at risk for depression. It must be borne in mind that postpartum depression is a complex phenomenon and that personality factors are likely to be necessary although not sufficient for the manifestation of postpartum depression.

A limitation of the study conducted by Boyce et al. (1991) was that the study had only focused on one vulnerability factor to depression and had not dealt with other risk factors such as life events, social support or social adversity. The implication of this limitation is that one needs to look at other risk factors in addition to personality in order to determine whether it is an interaction of these risk factors or whether it is just personality that makes women more vulnerable to depression in the postpartum period.

### **2.3.6 PHYSIOLOGICAL FACTORS**

Some studies have focused on biochemical factors in relation to postpartum depression (Nott, Franklin, Armitage & Gelder, 1976; Gelder, 1978; Handley, Dunn, Waldron & Baker, 1980). The biochemical model proposes that some kind of biochemical imbalance or dysfunction, manifests itself in symptoms of postpartum depression. According to Cutrona (1982) there has been no evidence in research to validate a physiological explanation of postpartum depression. It is beyond the scope of this thesis to include this aetiological factor as part of its area of investigation.

### **2.3.7. INTERPERSONAL RELATIONSHIPS: SOCIAL SUPPORT**



The birth of a baby is cited in the DSM-111-R as an example of a severe psychosocial stressor. Social support is therefore particularly significant in the postpartum period, as this period is characterized by increased demands imposed by the birth of a child. This means that postpartum women would therefore require an adequate and consistent supply of emotional and instrumental support. Gotlib, Whiffen, Wallace and Mount (1991) suggest that social support is the factor that appears to be most consistently associated with postpartum depression. The aforementioned researchers found that a lack of spousal support plays an important role in the development of postpartum depression.

Several studies have evaluated the role of social support in reducing the chances of postpartum depression, or if lacking in social support would render some women more at risk for developing postpartum depression. Research has shown that social relationships

play a significant role in postpartum adjustment (Mueller, 1980; O'Hara, Rehm and Campbell, 1983; O'Hara, 1986). It is generally believed that social support contributes to positive adjustment and personal development and secondly, provides a buffer against the effects of stressful life events (Sarason, Levine, Basham & Sarason, 1983).

A good deal of research has addressed the role of social support as a buffer against the negative effects of stressful life events (O'Hara, Rehm & Campbell, 1983; Paykel et al., 1980). In this context a supportive marital relationship would act as a buffer and reduce the likelihood of postpartum depression. Whiffen and Gotlib (1993) found that women with postpartum depression reported lower marital satisfaction and higher stress. Several investigators have confirmed this finding (Kumar & Robson, 1984; O'Hara, 1986; Whiffen, 1988). None of the studies mentioned above have assessed the confounding effects of marital status and how marital status may be a protecting factor against the development of postpartum depression. Of crucial significance for the purposes of this study is a comparison of the levels of depression between unmarried primiparae involved in a heterosexual relationship with married primiparae.

### **2.3.8. LIFE EVENTS**

The fact that women in the postpartum period are more at risk for depression means that the impact of other current life events (such as bereavement or physical illness) and difficulties are radically altered for these women during the postpartum period. As suggested, because childbirth is a major life event in its own right (Rappoport, 1977; Holmes & Rahe, 1967), there is increasing evidence which suggests that stressful life events



are a significant factor in the development of depression (Brown & Harris, 1978; Paykel et al., 1980; O'Hara et al., 1984; O'Hara, 1986; O'Hara et al., 1991). In the study conducted by Paykel et al. (1980) subjects were interviewed once at six weeks postpartum. Women who were depressed postpartum reported significantly more stressful life events during pregnancy and for the postpartum period than did women who were not depressed. A limitation of the study is its retrospective assessment of life events in that the perception of the negative impact of events could have been distorted by the depression, thus making the conclusions of the study highly tenuous.

In a prospective study conducted by O'Hara, Rehm and Campbell (1983) depressed (n = 11) and non-depressed (n = 19) (sub-samples) women were compared on life stress measures. The results indicated that depressed women experienced significantly more stressful events in the postpartum period than did the non-depressed. A major limitation of this study is the very small sample size, which makes the conclusions drawn of limited validity. These studies, however, confirm a significant relationship between life events and postpartum depression. None of the studies have investigated the relationship between negative life events in primiparae and levels of depression.

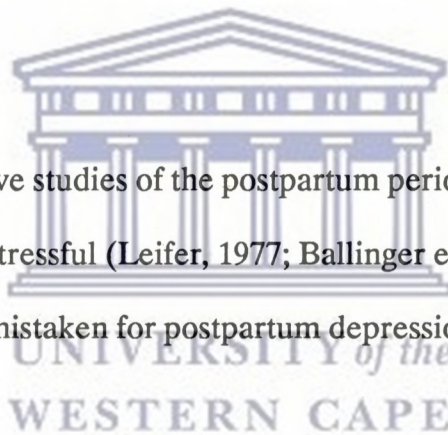
Brown and Harris (1978) suggest that individuals vary considerably in the degree of emotional distress they experience following stressful life events, including childbirth. They suggest that there are some women who would be more at risk for psychiatric disorders in the postpartum period than others. From the review of the various aetiological factors, it appears that there are a few factors that activate a vulnerability to depression. For the

purposes of this study, life events, social support and personality (neuroticism) were chosen as important risk factors for women in the postpartum period.

### 2.3.9. MATERNAL ADJUSTMENT AND ATTITUDE (MAMA)

As far as could be determined, maternal adjustment and attitude have never been studied in relation to postpartum depression. As suggested by O'Hara and Zekoski (1986) studies of postpartum depression should include measures of impairment in functioning in addition to an assessment of the various symptomatology and disorders prevalent in the postpartum period.

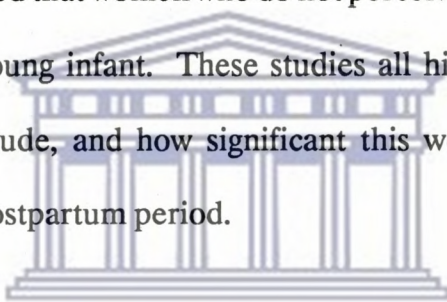
It is noteworthy that descriptive studies of the postpartum period have concluded that the period after delivery is most stressful (Leifer, 1977; Ballinger et al., 1979); these common reactions to delivery may be mistaken for postpartum depression (Hopkins et al., 1984).



This raises an important consideration, namely whether poor adjustment in the postpartum period has been confused with postpartum depression. Thus, it is of important methodological significance for studies to include some measure of maternal adjustment in the postpartum period.

Several studies have been conducted that point toward difficulties in adjustment to the maternal role. Kumar and Robson (1984) found that pregnant depressed women reported more ambivalence about the pregnancy, suggesting that maternal attitude and/or adjustment toward pregnancy and birth is a factor that is linked to depression in the postpartum

period. Davids and Holden (cited in Hopkins et al., 1984) assessed maternal attitudes toward child rearing during pregnancy. At eight months postpartum, blind clinical ratings of maternal characteristics were obtained. Results indicated that maternal hostility toward the family and negative child rearing attitudes were positively associated with maternal anxiety and depression. Cutrona and Troutman (1986) argue that women who develop a perception of themselves as ineffective mothers experience depression in the postpartum period. Gotlib et al. (1991) stressed the importance of the women's adaptation to the maternal role. In that study, women who had been depressed postpartum reported a lower quality of early caring that they perceived from their own mothers. Pfof, Lum and Stevens (quoted in Whiffen, 1992) argued that women who do not perceive themselves as nurturant may feel inadequate with a young infant. These studies all highlight issues relating to maternal adjustment and attitude, and how significant this would be when viewed in relation to depression in the postpartum period.



UNIVERSITY OF  
WESTERN CAPE

The studies also highlight the importance of investigating changes in maternal attitudes as pregnancy progresses, how women adjust in their role as mother, what their attitude is toward the baby and what changes there have been in their marital relationship. What is of interest to this study is how the aetiological factors that relate to the postpartum depression syndrome simultaneously relate to maternal adjustment and attitude. The present study goes further to suggest that maternal adjustment and attitude might well be a 'masking factor' for depression in the postpartum period. Whiffen (1992) states in this regard:

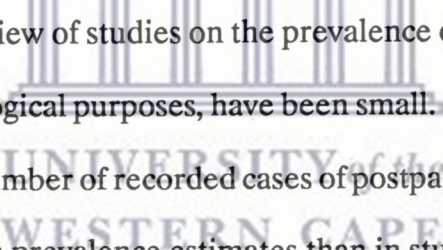
The picture that emerges from the aetiological studies is one where postpartum depression occurs when a woman experiences difficulties in her adaptation to the major life event of having a child (p.505).

A measure of maternal adjustment and attitude would provide an efficient method of determining specific areas of impaired functioning, and in so doing provide invaluable direction for treatment based intervention.

## **2.4. METHODOLOGICAL CONSIDERATIONS**

These methodological considerations may give reasons why there has been a failure in the literature to define postpartum depression as a discrete clinical entity.

### **2.4.1. SAMPLE SIZES**



Whiffen (1992) notes in her review of studies on the prevalence of postpartum depression that sample size, for epidemiological purposes, have been small. This implies that in small samples, small changes in the number of recorded cases of postpartum depression will have a relatively greater influence on prevalence estimates than in studies using a large sample size. Thus investigators' conclusions about the prevalence of postpartum depression have varied considerably.

### **2.4.2. RETROSPECTIVE VS. PROSPECTIVE DESIGNS**

Studies on postpartum depression have mainly used the prospective design in which potential causal factors are separated in time from outcome (depression) (Cutrona, 1983; Kumar & Robson, 1984; O'Hara, Neunaber & Zekoski, 1984). In studies based on the

prospective design women are recruited during pregnancy or shortly after delivery and followed up during the postpartum period. The timing of assessments have varied considerably amongst researchers in the field. This issue will be discussed in point 2.4.4 of this section. The advantages of the prospective design, as suggested by O'Hara and Zekoski (1988), are:

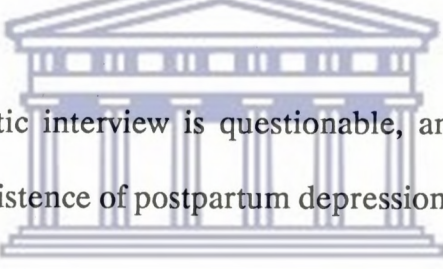
- i). Subjects are likely to report accurately on their current feelings and current events, rather than provide a retrospective account, which may be susceptible to bias.
- ii) If the predictor variable is measured prior to the measurement of the outcome measure, then there is less chance of bias on the part of both the subject and the investigator.

Studies that employ a prospective design, may have some variables that are measured at the same time that postpartum depression is measured. It is highly likely that subjects who are depressed might give a more negative account of, for example, life events if the life event measure was taken at the same time as the depression measure during the postpartum period (O'Hara & Zekoski, 1988). What this suggests is that the variables that are measured prior (have a prospective relevance) to one outcome are measured at the same time (have a retrospective relevance) as another outcome. This point will be made clear using the following example: social support assessed during pregnancy would have a retrospective relation to depression during pregnancy, but a prospective relation to postpartum depression, i.e. social support is assessed prior to the postpartum episode. Studies on postpartum depression have varied with regard to the use of prospective and retrospective relevance of the variables that have been investigated.

### 2.4.3. OUTCOME MEASURES

As stated earlier, postpartum depression research is characterized by the wide range of outcome measures for depression that have been used in the investigative studies. Early studies on postpartum depression involved a judgement by the researcher or obstetrician regarding the presence of postpartum depression (O'Hara & Zekoski, 1988). Since these early studies, more reliable and standardized measures have been used. For instance standardized assessment and diagnostic systems, questionnaires and diagnostic interviews have been employed in more recent studies on postpartum depression. The RDC, DSM-111-R, ICD-9 criteria and the Present State Examination have been used.

The reliability of the diagnostic interview is questionable, and raises once again the controversy surrounding the existence of postpartum depression:



A major issue, however, is the social significance of what researchers are diagnosing as postpartum depression when standard criteria such as the RDC or the ICD-9 are used. Most cases of postpartum depression diagnosed by researchers are never treated. ....it is fair to ask whether these untreated 'depressions' really should be diagnosed as depression. (edited from O'Hara & Zekoski, 1988, p. 20)

The self-report measures that have been used are: Zung Depression Inventory, General Health Questionnaire (GHQ), Beck Depression Inventory (BDI) and the Edinburgh Postnatal Screening Device (EPSD). The use of these standard depression symptom scales have the advantage of objectivity of measurement for depression. According to O'Hara and Zekoski (1988), the practice of using a 'cut-off' on a rating scale, to identify women experiencing postpartum depression may lead to misclassification. According to these

authors, high scores on these measures may reflect factors other than depression, including physical health.

#### 2.4.4. TIMING OF ASSESSMENT

The timing of assessments has also revealed a great inconsistency in postpartum depression research. The period covered by the assessment varies considerably from three days to one year (O'Hara & Zekoski, 1988). As there is poor consensus and little knowledge of what the specific aetiological or risk factors of postpartum depression are, this presents a crucial problem regarding the onset of depression and accordingly affects the timing of assessments. Thus research in the area is characterized by a choice of timing that is considered by that particular researcher to be a period of 'high risk' for depression in the puerperium. O'Hara and Zekoski (1988) suggest that the general strategy employed by researchers is to assess for postpartum depression at the earliest time that they believe most women will become depressed. This provides a cost effective study, and also women provide more reliable, and accurate information if the timing of the assessment is close to the depressive episode. Of course, the main risk is that depressions that begin late will invariably be missed, but also early onset depression with quick remission will be missed.

In conclusion, it is clear that each of the three syndromes identified in the postpartum period by investigators is fraught with complications regarding definition and classification. Consequently it is suggested that the purer form of describing the postpartum syndrome is to do away with the syndrome concept entirely and to describe the postpartum psychiatric disorder in terms of levels of depression.

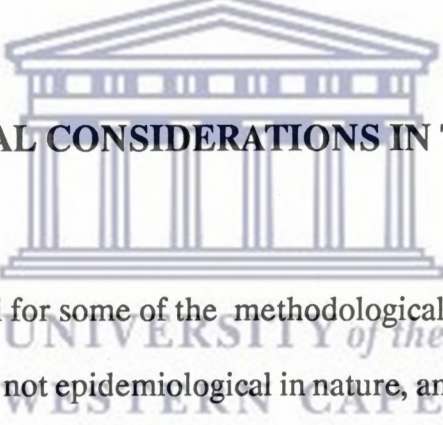
# CHAPTER 3

## METHODOLOGY

This chapter states the hypotheses investigated in this study. Additionally, there is a description of the subjects investigated in this study and the criteria used for their selection. The psychometric instruments utilized and their reliability and validity are described. The procedure followed in this study is discussed.

The chapter begins with a discussion of methodological considerations for this study as raised in the literature review (see Chapter 2, Section 2.4).

### 3.1. METHODOLOGICAL CONSIDERATIONS IN THIS STUDY



This study attempts to control for some of the methodological issues raised in Chapter 2. Since the focus of this study is not epidemiological in nature, and is not aimed at providing prevalence rates of postpartum depression, the sample size chosen has been based on the scope of the investigation.

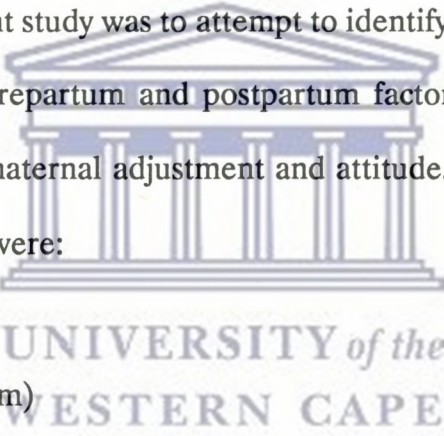
As this study focuses on an investigation of certain risk factors in determining levels of depression and maternal adjustment, it will use a prospective design. The use of a standardized depression inventory (Beck Depression Inventory), social support questionnaire, life events questionnaire, personality questionnaire, and the maternal adjustment and attitude questionnaire will allow for a comparison with other studies which have utilized these instruments.



As there is little knowledge of the actual onset of depression, the general strategy employed by researchers regarding the timing of assessment referred to earlier (see Chapter 2, section 2.4.4) will be employed. This raises an important methodological issue related to the position that this study takes regarding the existence and distinctness of postpartum depression. This study will focus on levels of depression and in so doing will not focus on providing a diagnosis for depression in the postpartum period.

### 3.2. HYPOTHESES

The general aim of the present study was to attempt to identify primiparous married and unmarried women, certain prepartum and postpartum factors that influence levels of postpartum depression and maternal adjustment and attitude. The specific aetiological factors included in this study were:

- 
- (i) personality (neuroticism)
  - (ii) social support
  - (iii) life events

The specific hypotheses related to the general aim of the present study and the above mentioned factors are given below.

H 1: Levels of depression among primiparae, married and unmarried, increase postpartum.

H01: Levels of depression among primiparae, married and unmarried, do not increase postpartum.

H 2: There is a difference between the married and unmarried primiparae in postpartum levels of depression.

H02: There is no difference between the married and unmarried primiparae in postpartum levels of depression.

H 3: There is a difference between the married and unmarried primiparae in postpartum levels of maternal adjustment and attitude.

H03: There is no difference between the married and unmarried primiparae in postpartum levels of maternal adjustment and attitude.

H 4: There is a difference between the married and unmarried primiparae in postpartum levels of depression which is related to their levels of neuroticism.

H04: There is no difference between the married and unmarried primiparae in postpartum levels of depression which is related to their levels of neuroticism.

H 5: There is a difference between the married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to their levels of neuroticism.

H05: There is no difference between the married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to their levels of neuroticism.

H 6: There is a difference between married and unmarried primiparae in postpartum levels of depression which is related to their levels of social support.

H06: There is no difference between married and unmarried primiparae in postpartum levels of depression which is related to their levels of social support.

H 7: There is a difference between married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to their levels of social support.

H07: There is no difference between married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to their levels of social support.

H 8: There is a difference between married and unmarried primiparae in postpartum levels of depression which is related to negative life events.

H<sub>08</sub>: There is no difference between married and unmarried primiparae in postpartum levels of depression which is related to negative life events.

H<sub>9</sub>: There is a difference between married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to negative life events.

H<sub>09</sub>: There is no difference between married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to negative life events.

H<sub>10</sub>: There is an interaction between the risk factors of personality characteristics (neuroticism), life events and social support which distinguishes between married and unmarried primiparae in their postpartum levels of depression.

H<sub>010</sub>: There is no interaction between the risk factors of personality characteristics (neuroticism), life events and social support which distinguishes between married and unmarried primiparae in their postpartum levels of depression.

H<sub>11</sub>: There is an interaction between the risk factors of personality characteristics (neuroticism), life events and social support which distinguishes between married and unmarried primiparae in their postpartum levels of maternal adjustment and attitude.

H<sub>011</sub>: There is no interaction between the risk factors of personality characteristics (neuroticism), life events and social support which distinguishes between married

and unmarried primiparae in their postpartum levels of maternal adjustment and attitude.

### **3.3. DESCRIPTION OF RESEARCH DESIGN**

This investigation was based on a pre-test - post-test design. Consequently women subjects were recruited in their third trimester of pregnancy and followed up six to nine weeks after delivery. All the subjects investigated were recruited from the Mitchells Plain Maternity and Obstetrics Unit during January 1993. The Mitchells Plain Maternity and Obstetrics Unit offers both an ante-natal and post-natal facility to women of the Mitchells Plain and surrounding areas. The size of the population which this clinic services is approximately 234 810 people (Census, 1991) and the clinic assesses on average 30 new patients per day. Their patient turnover is consistent across the year. Consequently, since January was not considered to be an exceptional month by the clinic administrators, and was convenient to the researcher, all subjects were initially interviewed during January 1993.

### **3.4. SUBJECTS**

A total of sixty nine (69) women subjects voluntarily participated in the first part of this study. Of this, 26 belonged to the married group and 43 to the unmarried group. As a result of the attrition factor, a total of 57 women subjects constituted the final sample for analysis. The final sample comprised 20 married and 37 unmarried women.

**Table 3.1. Statistics of subjects used in this investigation**

Marital Status	Number of Subjects	Mean Age
Married	20	22.91 years
Unmarried	37	20.11 years

### **3.4.1. SELECTION CRITERIA**

The aim of the selection criteria was to control for the following:

#### **3.4.1.1. MARITAL STATUS:**

The aim of the study was to compare the differential effects of risk factors on married and unmarried women. As pointed out in the literature review (Chapter 2, 2.3.4.4), researchers appear not to have controlled for the possibility that some women in the unmarried group may have been in a relationship and others may not. The present study attempted to control for this factor by ensuring that all the unmarried women were in a relationship. It was decided to opt for this alternative over the possibility of using subjects in the unmarried group who were not in a relationship. The reason for this was the fact that loss of a relationship, particularly one in which a child had been conceived, may have distorted the results.

Furthermore, this option would also provide for the opportunity to see whether the legal and social status of marriage per se adds something to relationships which might significantly alter postpartum depression patterns.

As this relationship factor was deemed to represent a methodological issue and not a theoretical issue, it was not incorporated into the hypotheses.

The unmarried group of women were selected on the basis of being involved in a heterosexual relationship. This allowed for the investigation to extend to marital status as a risk factor. Neither the length of marriage in the married group nor the length of the heterosexual relationship, in the case of the unmarried sample were controlled for. Women in their first marriage were selected in the sample of married women.

#### **3.4.1.2. PARITY:**

Primiparae (first time mothers) were selected for this study. This was considered to be an important criterion for selection because previous birth and pregnancy experiences enter as a factor affecting maternal attitude and adjustment, and the severity of depression (O'Hara & Zekoski, 1988).

#### **3.4.1.3. AGE:**

Age of subjects was considered a necessary criterion in order to control for adolescent pregnancies. High rates of the somatic symptoms of depression were reported in a study of pregnant adolescents (Cutrona & Troutman, 1990). Women who were 18 years and older were selected for participation in this study.

In the South African context 18 years is regarded as the age that one is considered to be a citizen responsible for one's actions.

#### **3.4.1.4. THIRD TRIMESTER OF PREGNANCY:**

Women who were in their third trimester of pregnancy were selected. Literature suggests that often those women who develop postpartum depression have in fact been depressed prepartum and in some instances during the earlier stages of pregnancy itself (O'Hara et al., 1983; Hayworth et al., 1980). Since the study was not concerned with the development of depression, a longitudinal analysis was considered beyond the scope of this study. Consequently all women were interviewed initially in the third trimester of their pregnancy, and again postpartum.

### **3.4. PSYCHOMETRIC INSTRUMENTS**



All the psychometric instruments were translated into Afrikaans and then back-translated by a second translator. Discrepancies in the translation were adjusted. The psychometric instruments utilised in this study were as follows :

A Biographical Information Sheet

The Beck Depression Inventory (BDI)

The Maternal Adjustment And Maternal Attitude Questionnaire (MAMA)



The Eysenck Personality Questionnaire (EPQ)

The List Of Threatening Experiences Life Events Questionnaire (LTE-Q)

The Social Support Questionnaire (SSQ)

These instruments will be described in the following sections.

### 3.4.1. BIOGRAPHICAL INFORMATION SHEET (Appendix A)

The biographical information obtained was as follows :

- i) Name and address
- ii) Age
- iii) Marital status
- iv) Occupation, employed or unemployed
- v) Household size
- vi) Total income
- vii) Planned or unplanned pregnancy
- viii) Previous history of depression



This information allowed the researcher to identify subjects and allocate them into groups, i.e. married and unmarried. It also allowed for statistical analyses of depression in relation to history of depression and analyses of the groups to ensure homogeneity of the sample.

### 3.4.2 THE BECK DEPRESSION INVENTORY (BDI) (Appendix B)

The BDI was derived from clinical observations about attitudes and symptoms displayed by depressed psychiatric patients (Beck et al., 1961). Although the BDI was initially designed to be administered by trained interviewers, it is most often used as a self-administered scale (Steer, Beck & Garrison, 1986). Items on the BDI assess the intensity of depression and do not reflect any developmental or aetiological theory of depression.

There are 21 symptoms and attitudes on the inventory which can be rated from 0 to 3 in terms of intensity. Responses are summed up to give a total score ranging from 0 to 63. The total scores are then categorized into levels of depression in the following way :

less than 14 reflects mild depression

14 to 20 reflects moderate depression

21 and above reflects severe depression.

The BDI correlates well with clinical judgement yielding values in numerous studies ranging between 0.60 and 0.90 (Steer et al., 1986). Regarding discriminant validity the BDI's relationship with psychiatric rating scales and psychological tests have generally yielded correlations which have ranged between 0.50 and 0.80 (Mayer, 1977, in Steer et al., 1986). The test-retest reliability of the BDI has been found to be in the 0.70's (Oliver & Burkham, in Steer et al., 1986). Thirteen studies in total have investigated the Beck scale with factor analysis, the range of factors isolated being three to seven; the alpha coefficient obtained in the various studies ranged from 0.76 to 0.95 (Bech, 1992).

The cross-cultural applications of the BDI are many, and the BDI has been translated into a number of different languages (Steer et al., 1986). Studies conducted in Spain, France, Germany, Denmark, Poland, India, Iran and Japan confirm the applicability of the BDI across cultures (Steer et al., 1986).

"The BDI has now become an established instrument and is used to support the concurrent validity and construct validity of other instruments" (Steer et al., 1986, p 135). In the light of the existing reliability and validity of the BDI, this was considered to be suitable for the present study.

### **3.4.3. THE MATERNAL ADJUSTMENT AND ATTITUDE QUESTIONNAIRE (MAMA) (Appendix C)**

The MAMA questionnaire is a 60 item self administered questionnaire which measures a mother's perception of her body (body image), somatic symptoms, the relationship with her partner, attitudes to sex, and attitudes to the pregnancy and the baby (Kumar, Robson & Smith, 1984). The questionnaire asks women to rate on a 4 point scale their responses to the five sub-scales mentioned above. The items are randomly ordered, with the rating scales randomly rotated in order to avoid a response set.

Reliability studies (Kumar et al., 1984) suggest that the MAMA questionnaire is a reliable instrument. The results are summarised in Table 3.2 below.

**TABLE 3.2 - Reliability Of The 60-Item MAMA Questionnaire**

	Test-retest reliability (n = 38)	Split-half reliability (n = 119)
Body Image	0.89	0.72
Somatic symptoms	0.83	0.58
Marital relationships	0.81	0.74
Attitude to sex	0.95	0.82
Attitude to pregnancy and the baby	0.84	0.73

Correlation coefficients between occasions (test-retest) and between halves of each scale are shown. All correlations are significant ( $p < 0.001$ )

From Kumar et al., (1984, p. 45)

### 3.4.4 THE EYSENCK PERSONALITY QUESTIONNAIRE (EPQ) (Appendix D)



The EPQ contains 90 items which measure the following dimensions of personality:

UNIVERSITY of the  
WESTERN CAPE


- i) Extroversion (E)
- ii) Neuroticism (N) refers to "emotionality"
- ii) Psychoticism (P) refers to "tough-mindedness"
- iv) "Lie" Scale (L) refers to a tendency on the part of some subjects to "fake good"

The questionnaire is self administered. The questionnaires are scored using a scoring sheet. A score of one point is obtained for each answer which is automatically allocated to one of the scales by the scoring key. The sum of these points are totalled to give a score for each of the E, N, P and L scales respectively.

The test-retest reliability on the EPQ yielded correlations which ranged between 0.79 to 0.89 (EPQ Manual, 1975).

The alpha coefficients, which is a calculation of the degree to which the questions in the scale cover a given area (consistency reliability), were computed. Values above 0.80 were obtained on the E, N, and L scale and, on the P scale, reliabilities were below this and ranged from 0.68 to 0.77 (EPQ Manual, 1975).

The EPQ has been standardized on a sample of normal and abnormal individuals with consideration given to social class, gender, and age, the great majority of the sample being urban residents.



The validity of the EPQ has only been computed for the P and L scales. Criterion related validity studies indicate a high correlation with several personality inventories and objective performance tests administered to psychotics. In addition, both male and female criminals, who would be expected to have psychopathic traits, also correlated higher with the P scale than normal controls. In a study of males and females, males scored higher on P than females. It was reasoned that this result indicated that P was identifying masculine patterns of attitudes and behaviour (EPQ Manual, 1975).

Similar validity studies are reported for the L scale. The manual (EPQ Manual, 1975) refers extensively to Eysenck's published work in this regard.

### **3.4.5 LIST OF THREATENING LIFE EVENTS QUESTIONNAIRE (LTE-Q) (Appendix E)**

The LTE-Q measures life events in the last six months and is used where more extensive life events measurement is not possible. The LTE-Q is a self administered instrument, which consists of 12 categories of common life events that are highly likely to be experienced as threatening. The respondent is asked to tick the box corresponding to the month in which an event happened or began. For each occurrence of an event a score of one is obtained, the final score is the total of the number of events.

The test-retest reliability of the LTE-Q yielded a coefficient of agreement that ranged between 0.66 and 0.84 (Brugha & Cragg, 1990). The inter-rater agreement (estimated by means of kappa) of the criterion ratings for the presence of at least one event was 0.88 over the previous 3 months, and it was 0.96 for the previous 6 months (Brugha & Cragg, 1990). Concurrent validity, based on the criterion of independently rated adversity derived from a semi-structured life events interview, making use of the Life Events and Difficulties Scale (LEDS), showed high specificity and sensitivity. For events 6 months prior to data collection, the sensitivity of the questionnaire was 0.89 and the specificity was 0.74 (Brugha & Cragg, 1990).

Researchers have found the LTE-Q to be a valid measure of the impact of life events on depression (Brugha & Conroy, 1985, Duncan & Campbell, 1988).

### 3.4.6 THE SOCIAL SUPPORT QUESTIONNAIRE (SSQ) (Appendix F)

An abbreviated version was used in this study (Spangenberg, 1987).

Twenty seven items of a variety of situations in which social support might be important to people are contained in the SSQ (Sarason, Levine, Basham & Sarason, 1983). The questionnaire quantifies the dimensions of perceived availability of, and satisfaction with, social support. Respondents are asked to list for each item all of the individuals who provided them with support in the situation described.

The SSQ yields scores for:

- i) perceived number of social supports (SSQ-N) and
- ii) satisfaction with social support that is available (SSQ-S)

The inter-item correlations of the SSQ-N scores varied from 0.35 to 0.71, with a mean of inter-item correlations of 0.54. The inter-item correlations of the SSQ-S ranged from 0.21 to 0.74, with a mean inter-item correlation of 0.37 (Sarason et al., 1983). The test-retest correlations for N and S were 0.90 and 0.83 respectively (Sarason et al., 1983). Criterion related validity studies shows that the SSQ correlates with measures of personality on the Eysenck Personality Inventory (EPI) and measures of depression on the Multiple Adjective Affect Check List (MAACL) Scales as seen in Table 3.3 below.

**Table 3.3** Correlations of the SSQ with the MAACL and EPI.

SSQ	Males		EPI	
	MAACL Depression	Extraversion	Neuroticism	
Number	-.24*	.13		-.25
Satisfaction	-.22*	-.03		-.29
n	100	28		28
Females				
Number	-.31**	.35		.15
Satisfaction	-.43**	.09		-.37*
n	127	38		38

\*p < .05. \*\*p < .001

From Sarason et al., (1983, p. 131)



UNIVERSITY of the  
WESTERN CAPE

### 3.5. PROCEDURE

The initial phase of the research was conducted at the Mitchells Plain Maternity and Obstetrics Unit over a three week period. The researcher scrutinized the files of patients due to be seen for their monthly check on the following day. A preliminary screening of possible subjects according to the subject selection criteria was done at this stage.

Subjects were approached individually at their monthly check appointment time and their participation in the investigation requested. If they agreed to participate, they were given information about their participation and were further screened according to the subject selection criteria. Those subjects fulfilling the conditions of the criteria completed the self



administered questionnaires, individually, in the presence of the researcher. The questionnaires were administered in the following order:

The BDI

EPQ

MAMA Questionnaire

The SSQ

LTE-Q

The following information was given to the subjects regarding their participation in the research:



The aim of the investigation is to find out how you are coping with being pregnant. Some of the questionnaires will look at depression, personality, your attitude toward being pregnant, what kinds of emotional help is available for you and lastly to discover whether you have experienced a crisis/crises in the last six months. All the information gained from the questionnaires will be treated confidentially. If you decide to participate, I would like you to commit yourself to the second part of this research, which again will be questionnaires that you will be asked to complete, and which will take place 4 to 8 weeks after you have had your baby.

On completion of the questionnaires they were informed that if they felt that the questionnaires had raised issues for them that they wanted to talk about, a referral would be arranged. Follow-up arrangements were made and subjects were thanked for their participation.

Women were followed up during the first trimester after delivery. In order to control for the effects of postpartum blues, a brief, benign condition simulating depression which occurs up to ten days postpartum (Pitt, 1973; Kennerly & Gath, 1989), it was necessary to impose a period of time before the follow up. Four to eight weeks was selected as the follow up period. The selection of a four to eight week postpartum period for follow up is based on findings that the greatest risk for depression is in the first trimester after birth (Kumar & Robson, 1984; Watson, et al., 1984).

For the follow-up, women were contacted telephonically and arrangements were made for the researcher to see them at home. The questionnaires were administered in the following order:

The BDI (Appendix B).

The MAMA Questionnaire (Appendix C).



# CHAPTER 4

## RESULTS

### 4.1. STATISTICAL ANALYSES

The nature of the data was such that a multiple analysis of variances with repeated measures was applicable (Howell, 1992). Where the groups differed in size, the proportional method of correcting for different sample size was used for multiple comparisons. The proportional solution (weighted means) was selected against the unweighted means solution because observation had shown that the sample of pregnant unmarried mothers was larger than the sample for pregnant married mothers. In the unweighted means method a formula is applied to tabulate the effect of different sample size. An average value for the sample (N) is computed, which is then applied to all samples irrespective of size. In the proportional solution "the sample sizes are treated as part of the treatment effect in that larger samples carry more weight in the analysis" (Howell, 1992, p. 412). The only condition for this application is that there is a consistent ratio between the sample groups. As this analysis was performed on repeated measures, all groups remained in the same proportion to each other thus fulfilling the condition for this application. The use of the proportional solution over unweighted means was borne out empirically (see Table 4.1 and Table 4.2) where the Beck Depression Inventory (BDI) scores with the unweighted means solution gave extremely significant results whereas when the proportional solution was applied none of the results were significant. Furthermore, multiple t tests between the various groups failed

to show significant differences ( as would have been suggested by the unweighted means method) and thereby supported the results of the proportional solution analysis. This solution was therefore applied throughout the analysis of the results because, owing to the relatively small sample size, it was decided to err on the side of caution and not to inflate the chance of a type 1 error i.e. rejection of the null hypothesis when it is actually true.

**Table 4.1 Unweighted Means Solution**

Multiple Analysis of Variance: Beck Depression Inventory Scores, before and after delivery in married and unmarried primiparae.

Source	df	SS	MS	F	p
<b>Between</b>	<b>119</b>	<b>5283.591</b>			
Marital Status (S)	1	4343.113	4343.113	51.884	p < 0.01
Time (T)	1	643.510	643.510	7.675	p < 0.01
S x T	1	297.436	297.436	3.553	
Within (error)	122	10212.389	83.708		

**Table 4.2 Proportional Means Solution**

Multiple Analysis of Variance with Repeated Measures: Beck Depression Inventory Scores, before and after delivery in married and unmarried primiparae.

Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>7565.123</b>			
Marital Status (S)	1	175.523	175.523	1.3063	p > 0.1
Ss w/in groups	55	7389.600			
<b>Within</b>	<b>57</b>	<b>2114.500</b>			
Time	1	63.377	63.377	1.7209	p > 0.1
S x T	1	25.685	25.685	0.6975	p < 0.1
Within (error)	55	2025.438	36.826		

## 4.2. DEPRESSION

The analysis of the BDI scores as the dependent measure of depression (see Table 4.2 above) failed to show differences between the groups, viz. there was no difference between the unmarried and married groups ( $F = 1.306$ ;  $df = 1,55$ ;  $p < 0.1$ ), nor did the measure of depression change significantly from before birth to after birth ( $F = 1.721$ ;  $df = 1,55$ ;  $p < 0.1$ ). Furthermore the unmarried and married groups failed to show any differential change in the BDI score before and after birth ( $F = 0.697$ ;  $df = 1,55$ ;  $p < 0.1$ ).

Consequently, the nul hypotheses, namely

H<sub>01</sub> : Levels of depression among primiparae, married and unmarried, do not increase postpartum.

and,

H<sub>02</sub> : There is no difference between the married and unmarried primiparae in postpartum levels of depression,

is accepted and the alternate hypotheses (H<sub>1</sub> and H<sub>2</sub>) are rejected.

Regarding the reliability of the BDI, a comparison of prepartum BDI scores and postpartum BDI scores showed a significant correlation ( $r = 0.57$ ;  $n = 56$  ;  $p < 0.01$ ), indicating a strong correspondence between relative levels of depression reported by the subjects in the pre and postpartum period.

### 4.3. MATERNAL ADJUSTMENT AND ATTITUDE

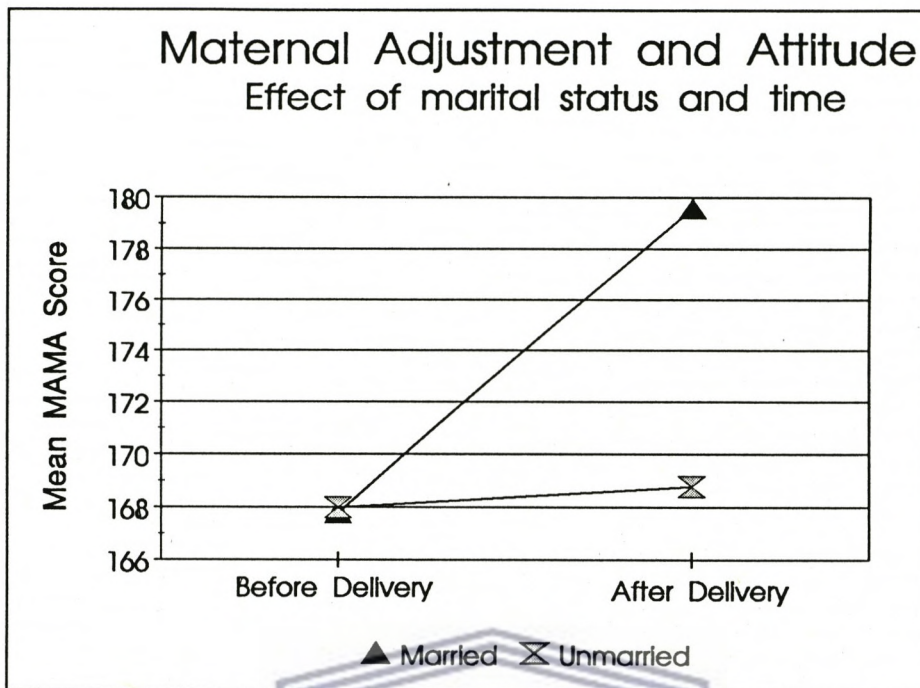
**Table 4.3 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude Scores, before and after delivery in married and unmarried primiparae.

Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>29323.123</b>			
Marital Status (S)	1	721.010	721.010	1.3865	p > 0.1
Ss w/in groups	55	28602.113			
<b>Within</b>	<b>57</b>	<b>10672.500</b>			
Time	1	616.009	616.009	3.6510	p > 0.1
S x T	1	776.778	776.778	4.6038	p < 0.05
Within (error)	55	9279.713	168.722		

While the Maternal Adjustment and Attitude (MAMA) scores did not distinguish between unmarried and married groups ( $F = 1.386$ ;  $df = 1,55$ ;  $p < 0.1$ ) or across time, namely before and after birth, ( $F = 3.651$ ;  $df = 1,55$ ;  $p < 0.1$ ), they did however illustrate a differential relationship between marital status and the time period (pre and postpartum) at which the subjects were tested ( $F = 4.604$ ;  $df = 1,55$ ;  $p < 0.05$ ). As can be seen in Figure 1 both unmarried and married subjects demonstrate an almost identical maternal adjustment prior to giving birth. While the unmarried mothers showed almost no change in maternal adjustment after birth, the maternal adjustment of the married mothers significantly increased after the birth of the child.

FIGURE 1



The null hypothesis ( $H_{03}$ ) is therefore rejected, in favour of the alternate hypothesis ( $H_3$ ) which states: that there is a difference between the married and unmarried primiparae in postpartum levels of maternal adjustment and attitude.

Regarding the reliability of the MAMA, a comparison of prepartum MAMA scores and postpartum MAMA scores showed a significant correlation ( $r = 0.48$ ;  $n = 56$  ;  $p < 0.01$ ), indicating a strong correspondence between relative levels of maternal attitude and adjustment reported by women in the prepartum and postpartum period.

These results do not contradict the analysis of variance results. The correlation test would be sensitive to the way scores vary across the time period and, would not be sensitive to their relative levels.

In other words, a significant correlation would suggest that the individuals in the groups before and after delivery demonstrated similar directions in their scores. Thus, with a significant correlation, high scorers before delivery would also be high scorers after delivery. Similarly, low scorers before delivery would be low scorers after delivery.

The correlation coefficient of 0.48 (although significant) means that the before delivery scores only predicts 23% of the post delivery scores, which may be due to the difference between the married and the unmarried group after delivery.

The maternal adjustment and attitude sub-scale is divided into 5 sub-scales which reflect attitude towards body image, somatic symptoms, marital relationship, sex, and attitude to pregnancy and baby. A multiple analysis of variance with repeated measures of married and unmarried women before and after birth was done individually on each of these sub scales.



### 4.3.1 Body Image

**Table 4.4 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude Scores, Body Image Sub Scale, before and after delivery in married and unmarried primiparae.

Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>1755.333</b>			
Marital Status (S)	1	79.150	79.150	2.5971	p > 0.1
Ss w/in groups	55	1676.184	30.478		
<b>Within</b>	<b>57</b>	<b>644.000</b>			
Time	1	20.211	20.211	1.7957	p < 0.1
S x T	1	4.795	4.795	0.4260	p < 0.1
Within (error)	55	618.995	11.254		

On the body image scale, scores were not affected by marital status ( $F = 2.597$ ;  $df = 1,55$ ;  $p > 0.1$ ), nor did attitude toward body image change significantly before and after birth ( $F = 1.796$ ;  $df = 1,55$ ;  $p > 0.1$ ). This suggests that body image is not sensitive to pregnancy and birth. (See Table 4.4)

### 4.3.2 Somatic Symptoms

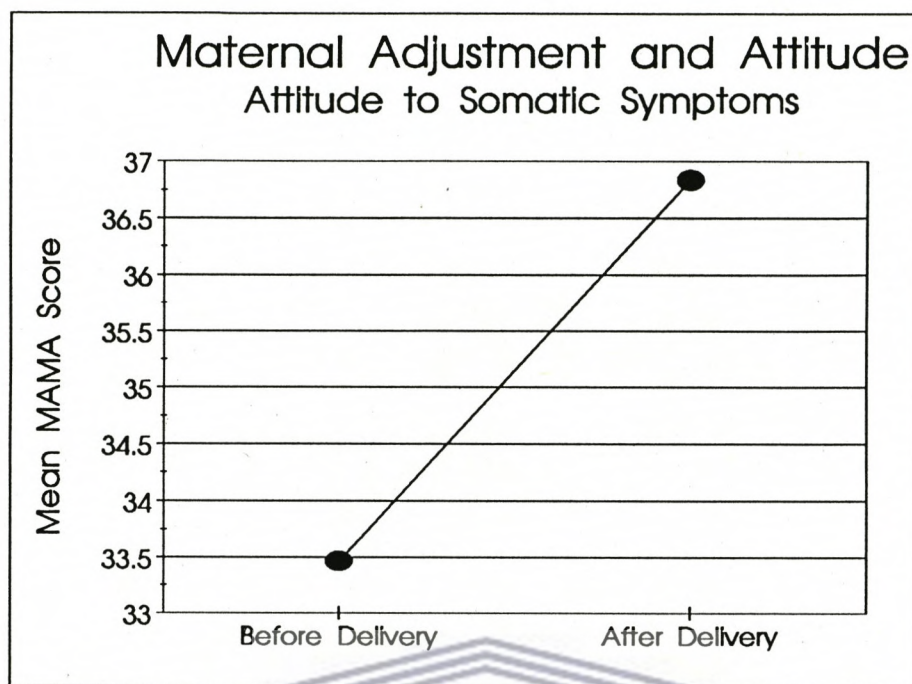
**Table 4.5 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude Scores, Somatic Symptoms Sub Scale, before and after delivery in married and unmarried primiparae.

Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>1448.158</b>			
Marital Status (S)	1	0.004	0.004	0.0001	p > 0.1
Ss w/in groups	55	1448.154	26.330		
<b>Within</b>	<b>57</b>	<b>1021.000</b>			
Time	1	323.368	323.368	26.8865	p < 0.01
S x T	1	36.137	36.137	3.0046	p > 0.1
Within (error)	55	661.495	12.027		

Although attitude toward somatic symptoms showed a significant increase after delivery ( $F = 26.88$ ;  $df = 1,55$ ;  $p < 0.01$ ), it was not affected by marital status ( $F = 0.0001$ ;  $df = 1,55$ ;  $p > 0.1$ ). (See Figure 2)

**FIGURE 2**



UNIVERSITY of the  
WESTERN CAPE

**4.3.3 Attitude Toward Relationship**

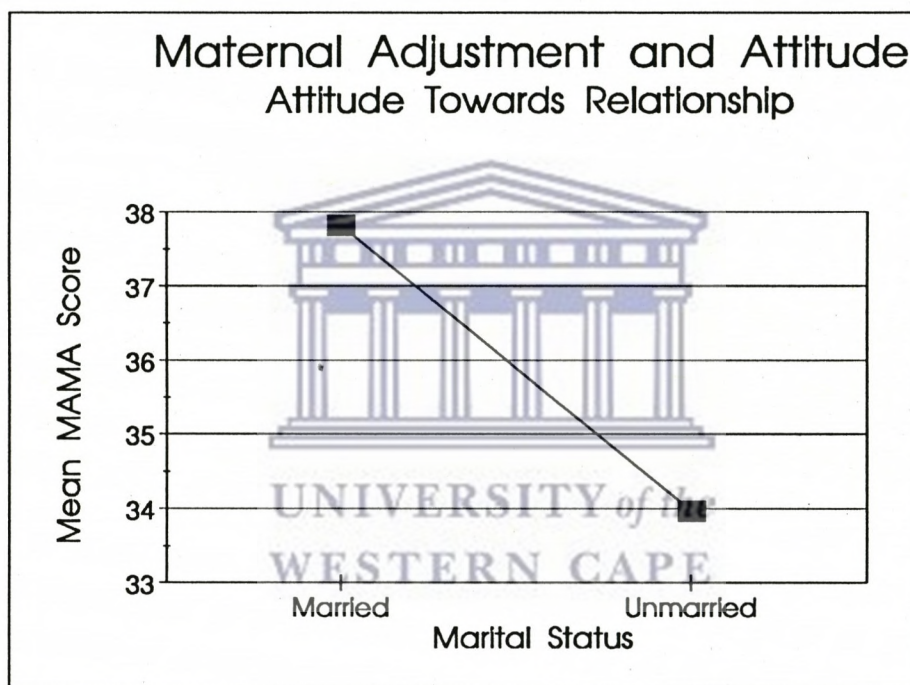
**Table 4.6 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude Scores, Attitude Towards Relationship Sub Scale, before and after delivery in married and unmarried primiparae.

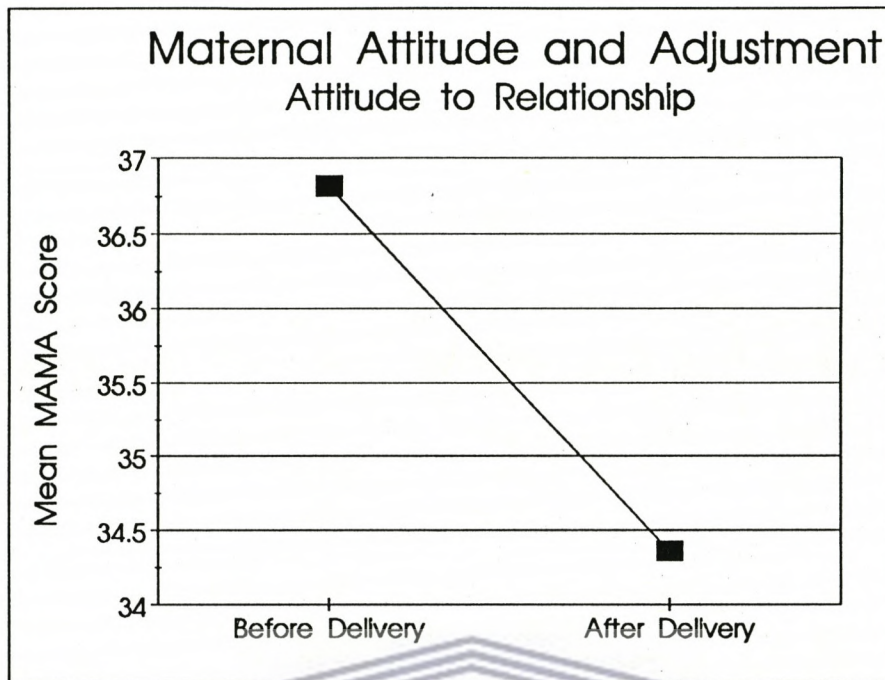
Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>4906.491</b>			
Marital Status (S)	1	385.270	385.270	4.6868	p < 0.05
Ss w/in groups	55	4521.221	82.204		
<b>Within</b>	<b>57</b>	<b>1110.500</b>			
Time	1	104.219	104.219	5.8891	p < 0.025
S x T	1	32.941	32.941	1.8614	p > 0.1
Within (error)	55	973.340	17.697		

The married group demonstrated a significantly more positive attitude toward relationships than did the unmarried women ( $F = 4.6868$ ;  $df = 1,55$ ;  $p < 0.05$ ) (see Figure 3). Attitude toward relationships, however, showed a significant decrease after the birth of the child ( $F = 51.114$ ;  $df = 1,55$ ;  $p < 0.01$ ). This would indicate that the mothers became more preoccupied with the baby than with the relationship with the partner. (See Figure 4)

**FIGURE 3**



**FIGURE 4**



**4.3.4 Attitude Toward Pregnancy and Birth**

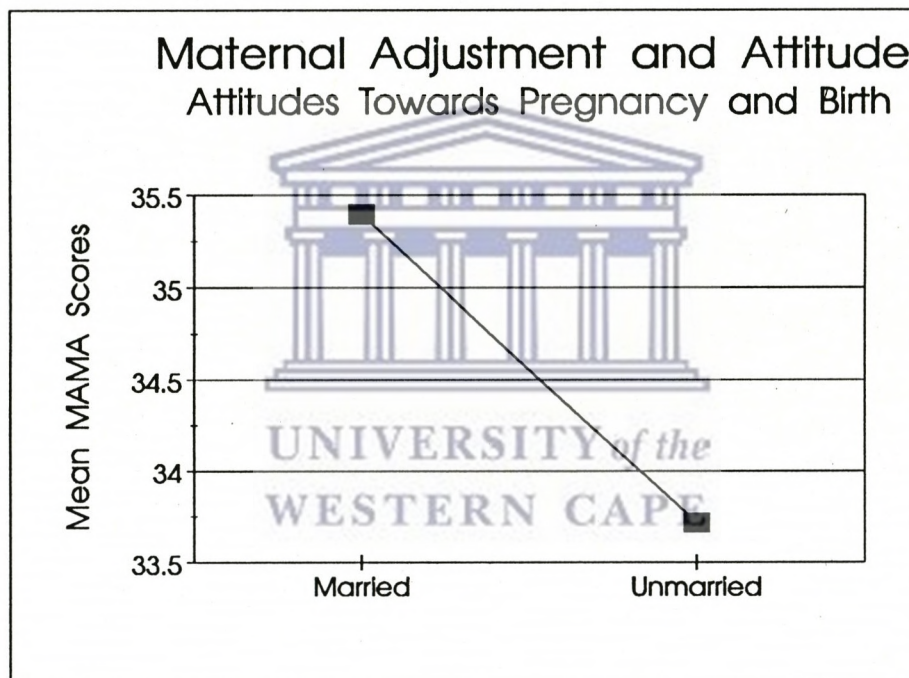
**Table 4.7 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude Scores, Attitude Towards Pregnancy and Birth Sub Scale, before and after delivery in married and unmarried primiparae.

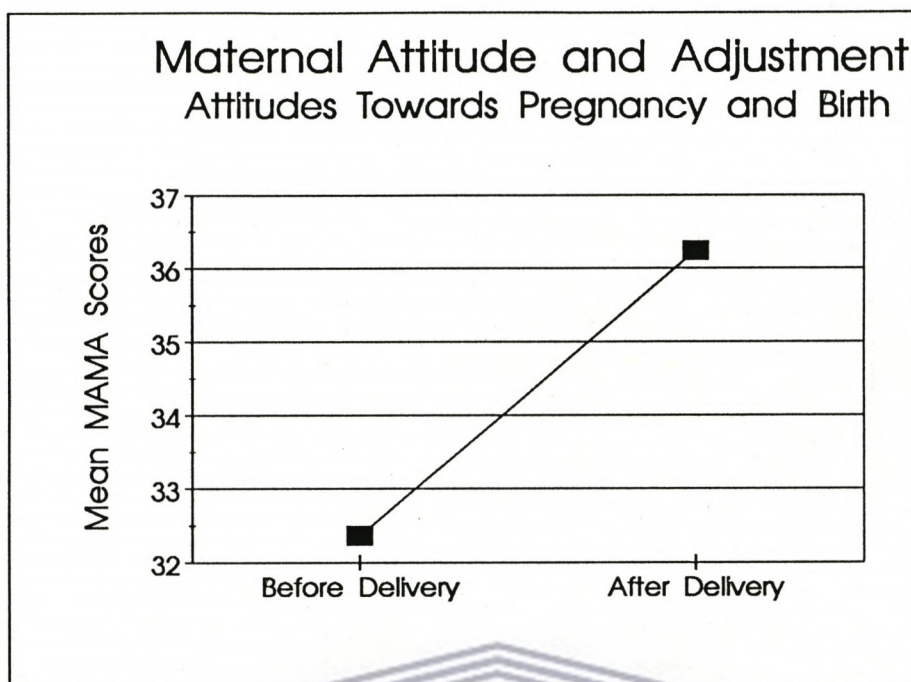
Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>951.754</b>			
Marital Status (S)	1	73.614	73.614	4.6106	p < 0.05
Ss w/in groups	55	878.141	15.966		
<b>Within</b>	<b>57</b>	<b>896.500</b>			
Time	1	428.430	428.430	51.113	p < 0.01
S x T	1	7.065	7.065	0.8428	p > 0.1
Within (error)	55	461.005	8.382		

Married women showed a more positive attitude toward pregnancy and birth than the unmarried women ( $F = 4.611$ ;  $df = 1,55$ ;  $p < 0.05$ ) (See Figure 5). Overall, i.e. in the married and unmarried group, the attitude towards pregnancy and birth increased after delivery ( $F = 51.113$ ;  $df = 1,55$ ;  $p < 0.01$ ) (see Figure 6).

**FIGURE 5**



**FIGURE 6**



**4.3.5 Attitude Toward Sex**

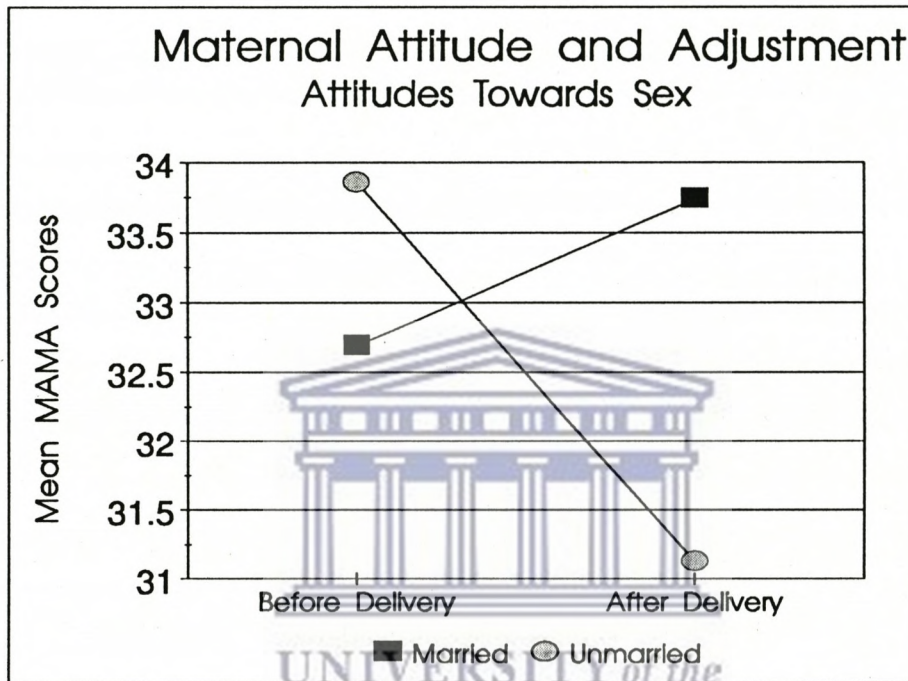
**Table 4.8 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude Scores, Attitude Towards Sex Sub Scale, before and after delivery in married and unmarried primiparae

Source	df	SS	MS	F	p
<b>Between</b>	<b>56</b>	<b>3262.123</b>			
Marital Status (S)	1	13.648	13.648	0.2311	p > 0.1
Ss w/in groups	55	3248.475	59.063		
<b>Within</b>	<b>57</b>	<b>1139.000</b>			
Time	1	56.140	56.140	3.1185	p > 0.1
S x T	1	92.736	92.736	5.1513	p < 0.05
Within (error)	55	990.124	18.002		

A differential effect of marital status and time was found in attitudes toward sex ( $F = 5.151$ ;  $df = 1,55$ ;  $p < 0.05$ ). This was contributed to by a significant deterioration in attitude toward sex among the unmarried group after the birth of the child. (See Figure 7).

**FIGURE 7**



#### 4.4 SUMMARY OF RESULTS IN TERMS OF HYPOTHESES

The results from this study do support the null hypotheses on the absence of significant changes in levels of depression ( $H_{01}$  and  $H_{02}$ ). There is evidence of significant changes in maternal adjustment and attitude postpartum related to marital status ( $H_{03}$ ).

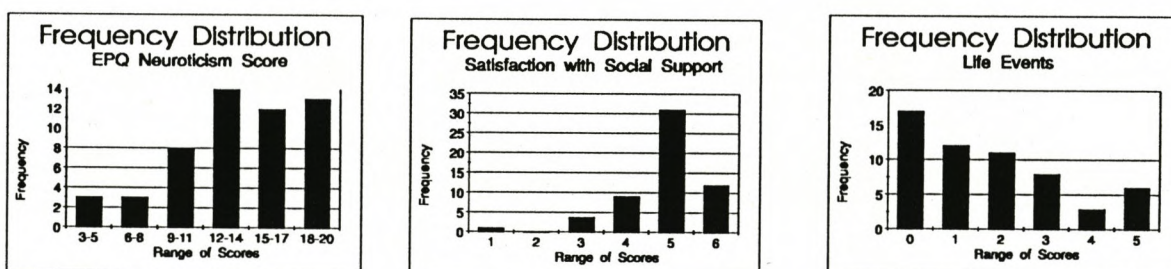
At this stage, it would be appropriate to move away from depression on its own, and focus on the influence of maternal adjustment and attitude. Research has shown, however, that



depression may be sensitive to risk factors, specifically personality (Akiskal et al., 1983; Hirschfeld et al., 1983), life events (Brown & Harris, 1978; Paykel et al., 1980; O'Hara, 1986) and social support (Paykel et al., 1980; O'Hara et al., 1983; Gotlib et al., 1991). It was felt that these research investigations provided enough justification for the original intention (see Chapter 3, Hypotheses) to investigate depression scores in terms of the above risk factors.

In order to investigate the influence of the risk factors, personality (neuroticism), social support (satisfaction and number) and life events, the relevant scores were divided into high and low score groups using the median as the cut off point. The median is best used as a measure of central tendency when the frequency distribution of a sample is skewed (Runyon & Haber, 1977). Inspection of the frequency distributions of the neuroticism scale of the Eysenk Personality Questionnaire (EPQ), the satisfaction scale of the Social Support Questionnaire (SSQ) and the life events questionnaire indicated that in all cases the frequency distribution was skewed (see Figure 8). Consequently the median was taken to divide the sample into high and low neuroticism, satisfaction and life events respectively. In this case, use of the statistical mean may give an artificial index of central tendency.

**FIGURE 8 : Distribution of Scores**



## 4.5. PERSONALITY

### 4.5.1. DEPRESSION

**Table 4.9 Multiple Analysis of Variance with Repeated Measures:**

Beck Depression Inventory Scores, before and after delivery in married and unmarried primiparae categorised in groups of high and low neuroticism scorers on the EPQ.

Source	df	SS	MS	F	p
<b>Between</b>	<b>113</b>	<b>7565.123</b>			
Marital Status (S)	1	175.523	175.523	2.895	p > 0.1
Neuroticism (N)	1	667.567	667.567	11.010	p < 0.01
S x N	1	52.373	52.373	0.864	p > 0.1
Ss w/in groups	110	6669.661	60.633		
<b>Within</b>	<b>114</b>	<b>2114.500</b>			
Time (T)	1	63.377	63.377	3.712	p > 0.1
N x T	1	129.552	129.552	7.588	p < 0.01
T x S	1	25.685	25.685	1.504	p > 0.1
N x T x S	1	17.884	17.884	1.048	p > 0.1
SxSs W/in groups	110	1878.002	17.073		

A significant difference between the BDI scores of the groups divided into high and low scores on the neuroticism scale of the EPQ ( $F = 11.01$ ;  $df = 1$ ;  $p < 0.01$ ) was found. (See Figure 9). This significant main effect was contributed to by an interaction between high

and low neuroticism depression scores and the period, before-after birth ( $F = 7.59$ ;  $df = 1$ ;  $p < 0.01$ ) (See Figure 10).

FIGURE 9

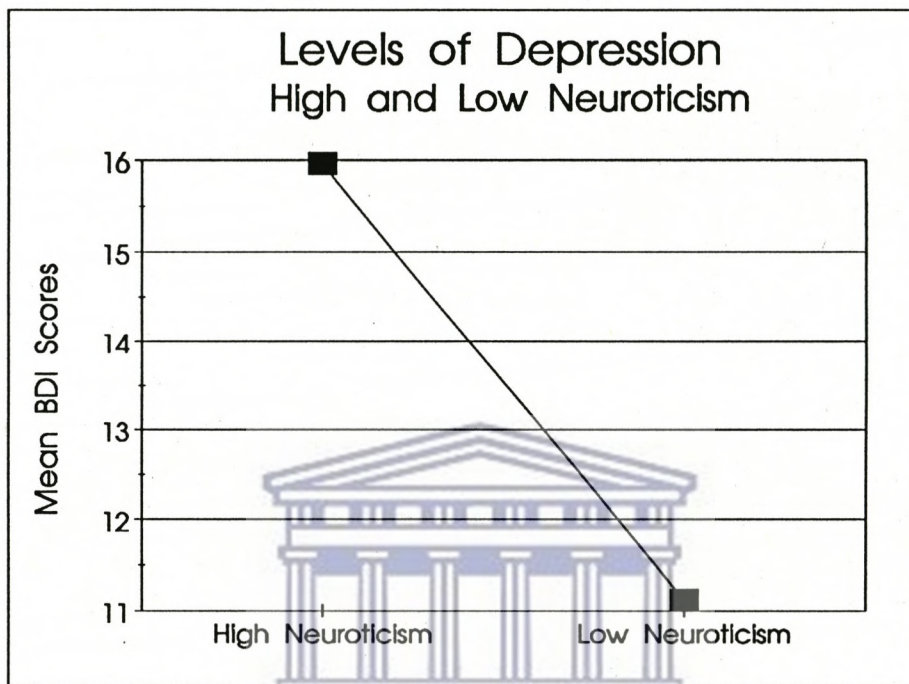
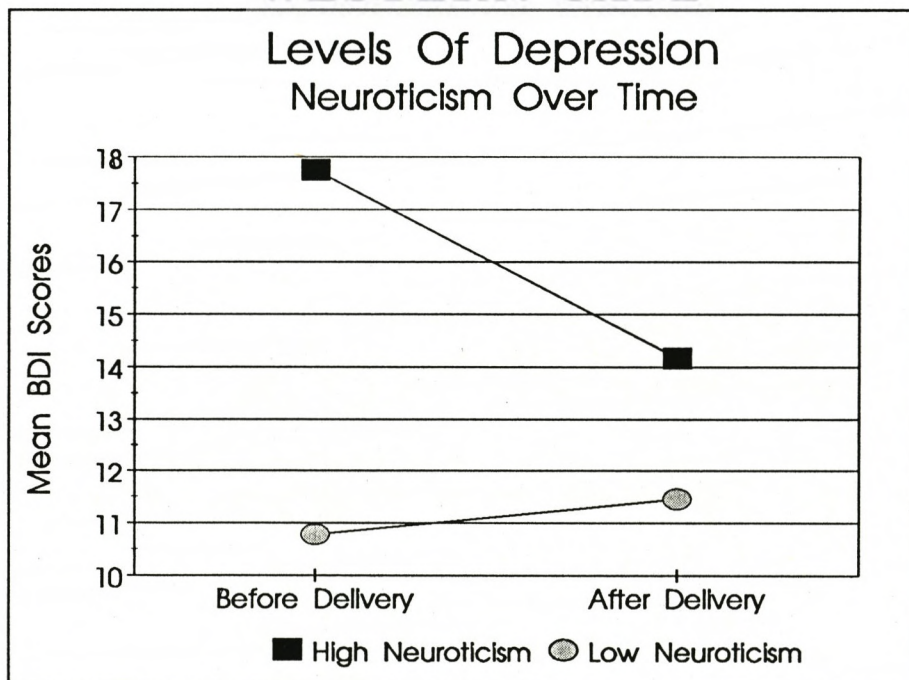


FIGURE 10



While this analysis indicated that postpartum depression scores were influenced by the level of neuroticism of the subjects, this was not sensitive to marital status. Consequently, the null hypothesis, namely:

H<sub>04</sub> : There is no difference between married and unmarried, primiparae in postpartum levels of depression which is related to their levels of neuroticism

is entertained, and the alternate hypothesis H<sub>4</sub> is rejected.

#### 4.5.2. MATERNAL ADJUSTMENT AND ATTITUDE

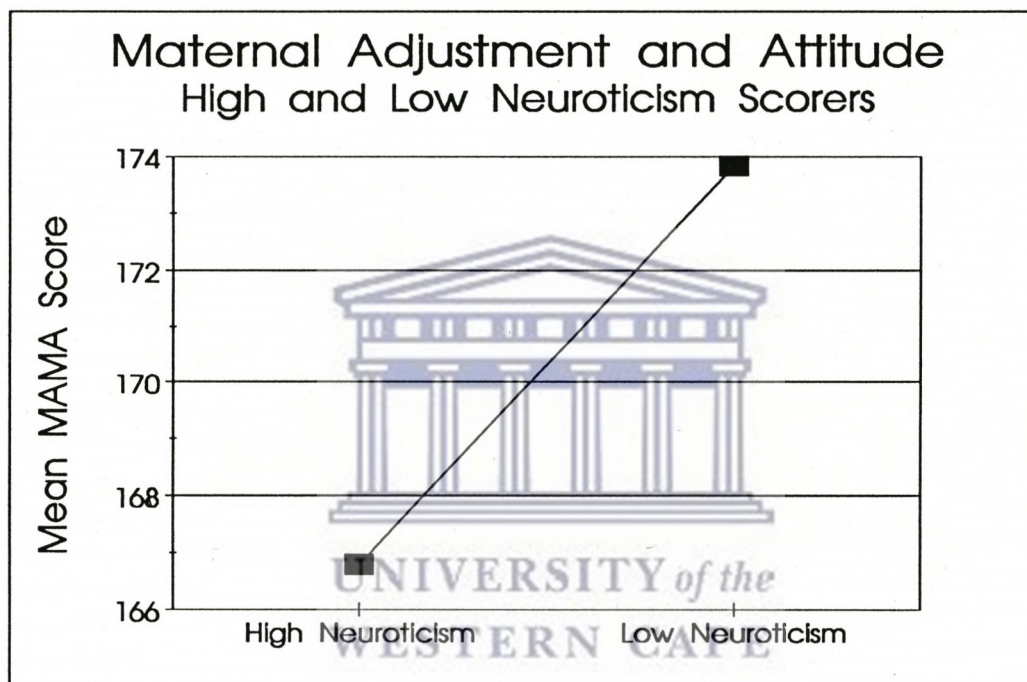
**Table 4.10 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude, before and after delivery in married and unmarried primiparae categorised in groups of high and low neuroticism scorers on the EPQ.

Source	df	SS	MS	F	p
<b>Between</b>	<b>113</b>	<b>29323.123</b>			
Marital Status (S)	1	721.010	721.010	2.921	p > 0.1
Neuroticism (N)	1	1414.552	1414.552	5.731	p < 0.025
S x N	1	37.948	37.948	0.154	p > 0.1
Ss w/in groups	110	27149.613	246.815		
<b>Within</b>	<b>114</b>	<b>10672.500</b>			
Time (T)	1	616.009	616.009	7.341	p < 0.01
N x T	1	43.428	43.428	0.518	p > 0.1
T x S	1	776.778	776.778	9.257	p < 0.01
N x T x S	1	5.856	5.856	0.070	p > 0.1
SxSs W/in groups	110	9230.4289	83.913		

There was a significant difference in the maternal attitude and adjustment score in relation to the high and low neuroticism scores (see Figure 11). The high neuroticism scorers had significantly lower maternal attitude and adjustment scores than the low neuroticism scorers ( $F = 5.731$ ;  $df = 1,108$ ;  $p < 0.025$ ).

**FIGURE 11**



Marital status failed to affect the MAMA scores in the high and low neuroticism groups ( $F = 0.154$ ;  $df = 1,110$ ;  $p > 0.1$ ).

Consequently, the alternate hypothesis  $H_5$  is rejected, and the hypothesis that there is no difference between the married and unmarried primiparae in postpartum levels of maternal attitude and adjustment ( $H_{05}$ ) is entertained.

## 4.6 SOCIAL SUPPORT

### 4.6.1. DEPRESSION

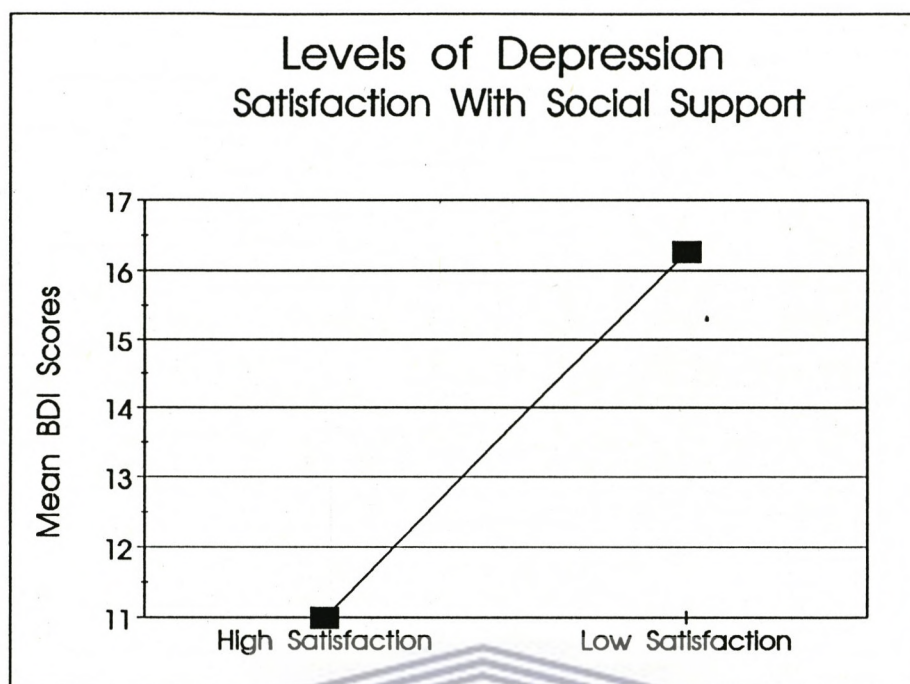
**Table 4.11 Multiple Analysis of Variance with Repeated Measures:**

Beck Depression Inventory Scores, before and after delivery in married and unmarried primiparae categorised in groups of high and low satisfaction with social support.

Source	df	SS	MS	F	p
<b>Between</b>	<b>113</b>	<b>7565.123</b>			
Marital Status (S)	1	175.523	175.523	3.083	p > 0.1
Social Support (SS)	1	790.641	790.641	13.886	p < 0.01
S x SS	1	335.728	335.728	5.896	p < 0.025
Ss w/in groups	110	6263.231	56.938		
<b>Within</b>	<b>114</b>	<b>2114.500</b>			
Time (T)	1	63.377	63.377	3.541	p > 0.1
SS x T	1	52.715	52.715	2.945	p > 0.1
T x S	1	25.685	25.685	1.435	p > 0.1
SS x T x S	1	3.755	3.755	0.210	p > 0.1
SxSs W/in groups	110	1968.968	17.900		

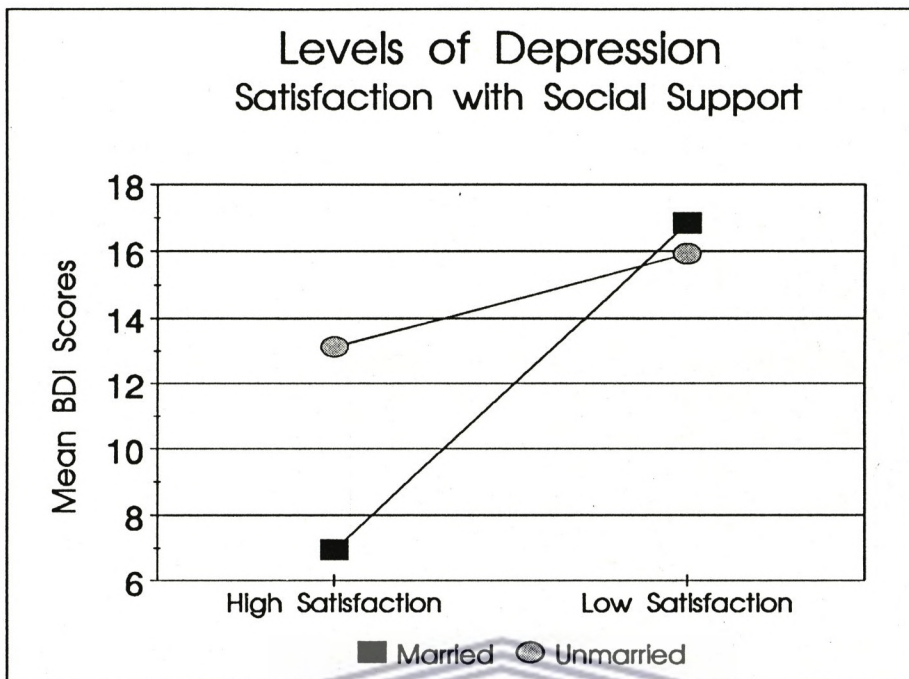
Women in the high satisfaction with social support group showed a lower mean depression score when compared to the women in the low satisfaction with social support group (F = 13.886; df = 1,110; p < 0.01) (see Figure 12).

FIGURE 12



The depression scores did not differ significantly between the high and low satisfaction unmarried women. In contrast, the married women with high satisfaction scores showed significantly lower depression scores than did the unmarried women with high satisfaction scores or the unmarried and married women with low satisfaction scores ( $F = 5.896$ ;  $df = 1,108$ ;  $p < 0.025$ ) (see Figure 13).

FIGURE 13



The hypothesis that there is a difference between married and unmarried primiparae in postpartum levels of depression which is related to their levels of social support (H<sub>6</sub>) is consequently accepted, and the null hypothesis H<sub>06</sub> is rejected.

UNIVERSITY of the  
WESTERN CAPE



## 4.6.2 . MATERNAL ADJUSTMENT AND ATTITUDE

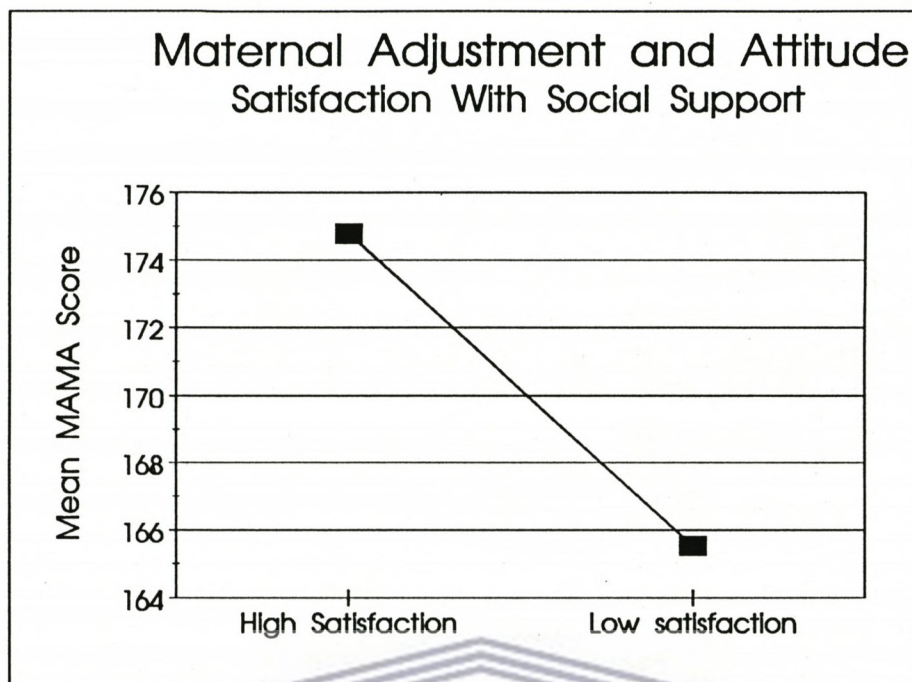
**Table 4.12 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude, before and after delivery in married and unmarried primiparae categorised in groups of high and low satisfaction with social support.

Source	df	SS	MS	F	p
<b>Between</b>	<b>113</b>	<b>29323.123</b>			
Marital Status (S)	1	721.010	721.010	3.036	p > 0.1
Social Support (SS)	1	2432.266	2432.266	10.243	p < 0.01
S x SS	1	48.430	48.430	0.024	p > 0.1
Ss w/in groups	110	26121.416	237.467		
<b>Within</b>	<b>114</b>	<b>10672.500</b>			
Time (T)	1	616.009	616.009	7.784	p < 0.01
SS x T	1	47.595	47.595	0.601	p > 0.1
T x S	1	776.778	776.778	9.816	p < 0.01
SS x T x S	1	527.099	527.099	6.661	p < 0.025
SxSs W/in groups	110	8705.018	79.137		

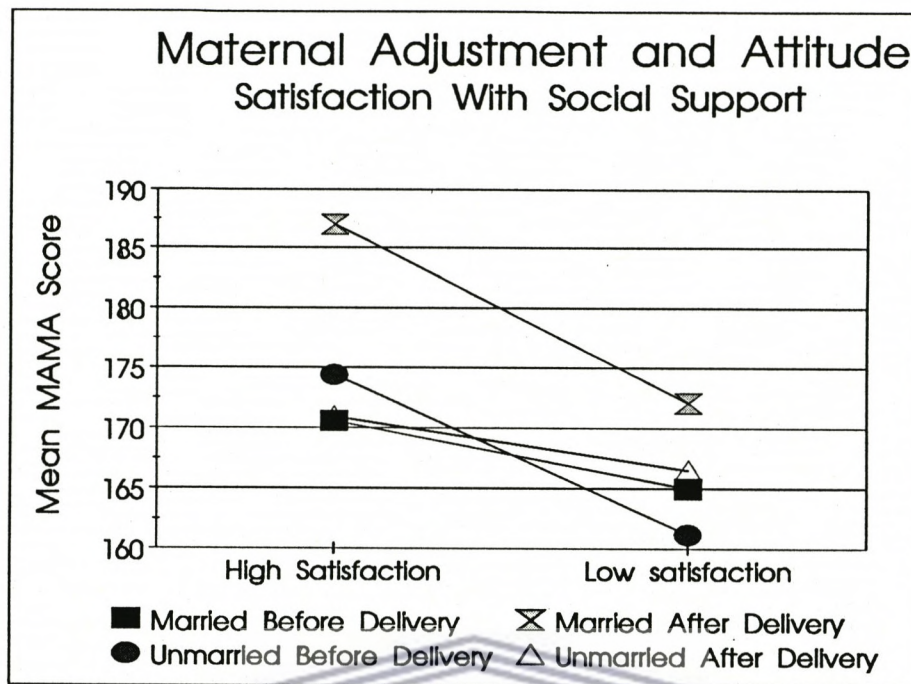
There was a significant result when maternal adjustment and attitude was analysed in relation to levels of satisfaction with social support; women who reported higher levels of satisfaction with social support showed higher maternal adjustment and attitude scores than women who reported low satisfaction with social support ( $F = 10.243$ ;  $df = 1,108$ ;  $p < 0.01$ ), (see Figure 14).

FIGURE 14



A significant interactional effect of marital status, high and low satisfaction with social support and time period (before and after delivery) was found ( $F = 6.661$ ;  $df = 1,108$ ;  $p < 0.025$ ). As illustrated in Figure 15 the unmarried women before and after birth and the married women before birth showed no difference, whereas the married women after birth, who were more satisfied with social support, showed higher maternal adjustment and attitude than did the married women after birth, who reported low satisfaction with social support.

FIGURE 15



The following hypothesis is therefore rejected:

H07 : There is no difference between married and unmarried primiparae in postpartum levels of maternal attitude and adjustment which is related to their levels of social support.

The alternate hypothesis:

H7: There is a difference between married and unmarried primiparae in postpartum levels of maternal attitude and adjustment which is related to their levels of social support

is accepted, in the case of the married women after delivery who have high satisfaction with social support scores.

## 4.7. LIFE EVENTS

### 4.7.1. DEPRESSION

**Table 4.13 Multiple Analysis of Variance with Repeated Measures:**

Beck Depression Inventory Scores, before and after delivery in married and unmarried primiparae categorised in groups of high and low life events.

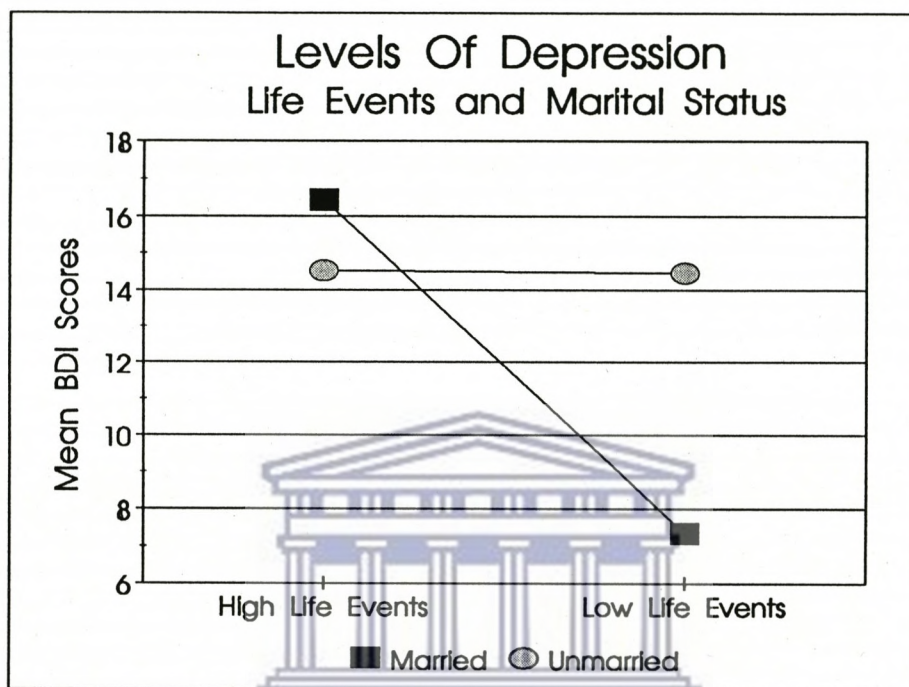
Source	df	SS	MS	F	p
<b>Between</b>	<b>113</b>	<b>7565.123</b>			
Marital Status (S)	1	175.523	175.523	2.943	p > 0.1
Life Events (L)	1	302.995	302.995	5.080	p < 0.05
S x L	1	525.159	525.159	8.804	p < 0.01
Ss w/in groups	110	6561.446	6561.446		
<b>Within</b>	<b>114</b>	<b>2114.500</b>			
Time (T)	1	63.377	63.377	3.510	p > 0.1
L x T	1	2.110	2.110	0.117	p > 0.1
T x S	1	25.685	25.685	1.423	p > 0.1
L x T x S	1	37.313	37.313	2.067	p > 0.1
SxSs W/in groups	110	1986.014	18.055		

In this analysis the Life Events main effect was significant ( $F = 5.080$ ;  $df = 1,110$ ;  $p < 0.05$ ).

When levels of depression are looked at differentially with life events and marital status, the finding is significant ( $F = 8.804$ ;  $df = 1,110$ ;  $p < 0.01$ ). Married women with high life

events showed high levels of depression, whereas in the unmarried group, depression scores do not appear to be significantly affected by life events (see Figure 16).

**FIGURE 16**



UNIVERSITY of the  
WESTERN CAPE

The null hypothesis

H<sub>08</sub> : There is no difference between married and unmarried primiparae in postpartum levels of depression which is related to negative life events

is accepted. The alternate hypothesis H<sub>8</sub> is rejected.

## 4.7.2. MATERNAL ADJUSTMENT AND ATTITUDE

**Table 4.14 Multiple Analysis of Variance with Repeated Measures:**

Maternal Adjustment and Attitude, before and after delivery in married and unmarried primiparae categorised in groups of high and low life events.

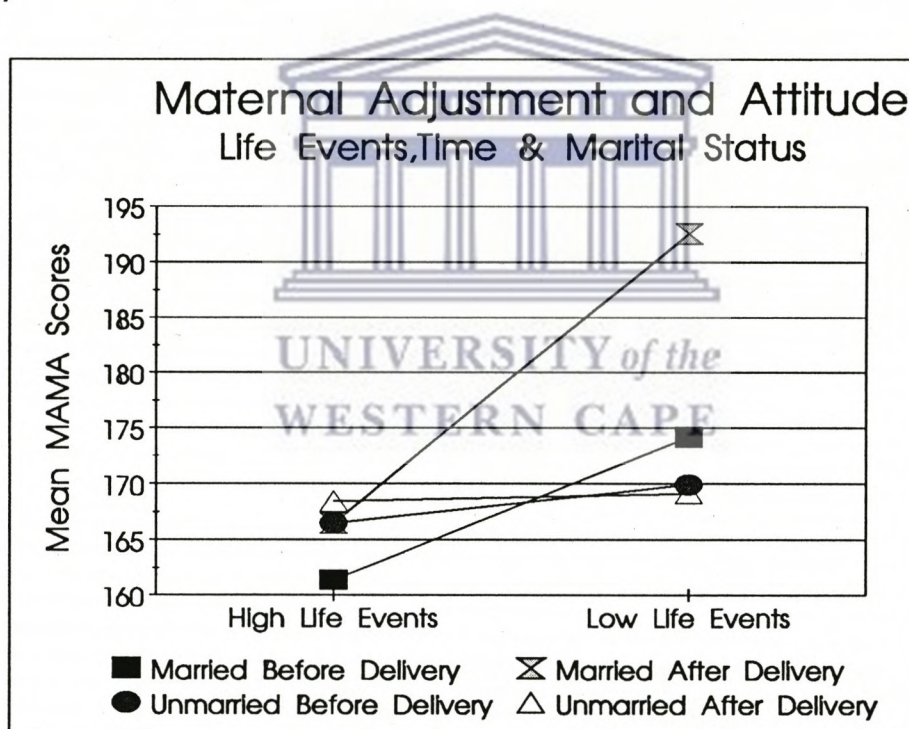
Source	df	SS	MS	F	p
<b>Between</b>	<b>113</b>	<b>29323.123</b>			
Marital Status (S)	1	721.010	721.010	3.208	p > 0.1
Life Events (L)	1	1984.019	1984.019	8.826	p < 0.01
S x L	1	1891.744	1891.744	8.416	p < 0.01
Ss w/in groups	110	24726.349	224.785		
<b>Within</b>	<b>114</b>	<b>10672.500</b>			
Time (T)	1	616.009	616.009	7.706	p < 0.01
L x T	1	55.666	55.666	0.696	p > 0.1
T x S	1	776.778	776.778	9.717	p < 0.01
L x T x S	1	430.789	430.789	5.389	p < 0.025
SxSs W/in groups	110	8793.258	79.939		

The life events ( $F = 8.826$ ;  $df = 1,110$ ;  $p < 0.01$ ) and time ( $F = 7.706$ ;  $df = 1,110$ ;  $p < 0.01$ ) main effects were significant, but the marital status main effect ( $F = 3.208$ ,  $df = 1,110$ ;  $p > 0.1$ ) was not significant.

There was a differential effect in the maternal adjustment and attitude scores between the married and unmarried women in relation to the high and low life events, before and after

delivery ( $F = 5.389$ ;  $df = 1,110$ ;  $p < 0.025$ ). This interaction contributed to the significance of the time and life events main effects. As can be seen in Figure 17, the unmarried women in both the high and low life events groups and the married women in the high life events groups showed no difference in mean MAMA score before and after delivery. The married women in the low life events group before delivery demonstrated similar mean MAMA scores to the other groups. After delivery the married women in the low life events group demonstrated significant increases in mean MAMA scores when compared to the other groups.

**FIGURE 17**

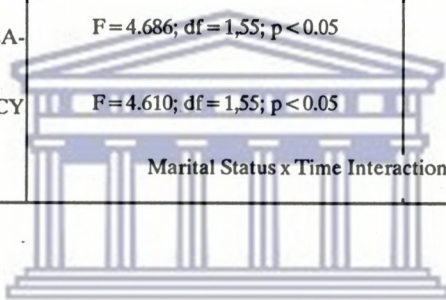


The null hypothesis ( $H_{09}$ ) that there is no difference between married and unmarried primiparae in postpartum levels of maternal adjustment and attitude which is related to negative life events is accepted. The alternate hypothesis is rejected.

## 4.8. SUMMARY OF SIGNIFICANT FINDINGS

**Table 4.12 a Summary of Significant Findings**

	MARITAL STATUS	TIME
DEPRESSION		
MATERNAL ADJUSTMENT AND ATTITUDE.	Marital Status x Time Interaction $F = 4.603; df = 1,55; p < 0.05$	
MAMA SCALES		
BODY IMAGE		$F = 28.886; df = 1,55; p < 0.01$
SOMATIC SYMPTOMS		$F = 5.889; df = 1,55; p < 0.025$
ATTITUDE TOWARD THE RELATIONSHIP	$F = 4.686; df = 1,55; p < 0.05$	$F = 5.889; df = 1,55; p < 0.025$
ATTITUDE TOWARD PREGNANCY AND BIRTH	$F = 4.610; df = 1,55; p < 0.05$	$F = 51.110; df = 1,55; p < 0.01$
ATTITUDE TOWARD SEX	Marital Status x Time Interaction $F = 5.151; df = 1,55; p < 0.05$	



UNIVERSITY of the  
WESTERN CAPE

**Table 4.12 b Summary of Significant Findings**

	NEUROTICISM	SOCIAL SUPPORT	LIFE EVENTS
DEPRESSION	Neuroticism X Time $F = 7.558; df = 1,110; p < 0.01$	Marital status X Time $F = 5.896; df = 1,110; p < 0.025$	$F = 5.080; df = 1,110; p < 0.05$
MATERNAL ADJUSTMENT AND ATTITUDE	$F = 5.731; df = 1,110; p < 0.025$	$F = 10.243; df = 1,110; p < 0.01$  Soc. Support X Marital status X Time $F = 6.661; df = 1,110; p < 0.025$	Marital status X Life Events $F = 8.804; df = 1,110; p < 0.01$  Life events X Marital status X Time $F = 5.389; df = 1,110; p < 0.025$



## 4.9. MULTIPLE REGRESSION

On the basis of the significant findings obtained when Maternal Adjustment and Attitude, and depression scores were analyzed in terms of risk factors (vis. neuroticism, satisfaction with social support and life events), it was decided to perform a stepwise multiple regression. In so doing it was hoped that this analysis might yield a model in which the depression and MAMA scores would be predicted by risk factors. This would then provide a test of hypotheses H<sub>010</sub> and H<sub>011</sub>. The data were analyzed using the SPSS computer programme.

For the analysis of depression scores as the dependent variable, the following variables were entered: neuroticism, satisfaction with social support, number of people in social support system and life events. The analysis failed to proceed beyond the first step. Consequently, the relative weighting of the different variables could not be determined. A multiple correlation coefficient of 0.151 was obtained. An  $r^2$  value of 0.023 was calculated. This indicates that only 2.3% of the dependent variable could be accounted for by the variables used in this analysis. An F value of 1.139 (df = 1,49) was not significant ( $p > 0.1$ ). The results of the multiple regression suggest that the risk factors as investigated here do not provide a model in which postpartum depression scores can be predicted in terms of any of the risk factors. In consequence the null hypothesis which stated that "There is no interaction between the risk factors of personality (neuroticism), life events and social support, which distinguishes between married and unmarried primiparae in their postpartum levels of depression", is accepted (H<sub>010</sub>).

Similar results were obtained when the analysis, employing the same variables, was used with the MAMA scores as the dependent variable. Again the risk factors failed to provide a predictive model for MAMA. In this case the analysis also failed to proceed beyond the first step and yielded a multiple correlation coefficient of 0.148. The  $r^2$  value was computed as 0.022 indicating that 22% of the dependent variable was predicted by the variables entered into this equation. The F value was not significant ( $F = 1.18$ ;  $df = 1,49$ ;  $p > 0.1$ ). The null hypothesis is accepted ( $H_{011}$ ).



# CHAPTER 5

## DISCUSSION OF RESULTS

### 5.1. INTRODUCTION

Results of this study will be discussed in the light of the findings in previous investigations. In addition to this, it will be argued that postpartum depression is neither a discrete psychological entity nor is it a manifestation of levels of depression. It will be suggested that postpartum depression is a psychological expression of a social condition. It will be argued that, in the community studied in this investigation, the social identity of women, irrespective of their marital status, typically protects them from the psychological states which manifest as the symptoms associated with postpartum depression. Future research into the relationship of the social identity of women and depression is suggested. Consequently, in viewing the interpretation of the results, it is important to keep the above context in mind.

## 5.2. DEPRESSION

No difference was found in the levels of depression between the married and unmarried groups, either before or after giving birth. This would indicate that postpartum depression is not a syndrome that affects this sample. The finding in this study is consistent with those obtained by O'Hara et al. (1990) and Troutman and Cutrona (1990). O'Hara et al. (1990) observed that 10.4% of childbearing subjects and 7.8% of non-childbearing subjects met the criteria for major or minor depression, which was not a significant difference. They concluded that the postpartum period is not a time of elevated risk for depression.

A similar conclusion was drawn by Troutman and Cutrona (1990) who compared childbearing adolescents with non-childbearing adolescents. In examining the extent to which childbearing increases vulnerability to depression among primiparous adolescent girls, there was no evidence that childbearing places adolescents at a significantly increased risk for depression.

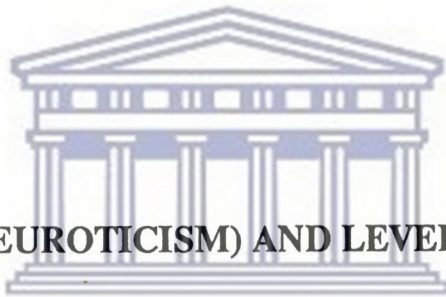
The results from the two studies, taken together with the present study, call into question the assumption that the first few months after delivery are a time of increased risk for depression amongst women. Whiffen (1992), in reviewing the evidence of several investigations, argued that depression in the postpartum period generally is relatively mild and tends to remit more quickly when compared to non-postpartum depression. Therefore she concluded that it does not exist as an independent clinical entity.

The finding in this study supports the argument that the adjustment to the period following childbirth is significant and consequently the common sequelae of parturition may be confused with symptoms of depression (Hopkins et al., 1984). Complaints of physical discomfort, as well as cognitive, affective and somatic changes that result from the physical distress of labour and delivery (e.g. sleep disturbances, changes in appetite and loss of sexual interest), which are common amongst women in the immediate postpartum period, may be confused with vegetative symptoms of depression (Hopkins et al., 1984).

These results and conclusions are not supported by a number of investigations which have provided evidence of postpartum depression (Pitt, 1968; Cox et al., 1983; Kumar and Robson, 1984; O'Hara et al., 1984; Watson et al., 1984). In interpreting the discrepancy between the findings of these researchers and the present study, consideration must be given to the possibility that the present results pertain to the sample used. In other words, if the sample had been drawn from another context it is possible that the results may have been in line with research supporting postpartum depression. Studies have revealed that neither socio-economic status (Todd & Eden, 1964; Pitt, 1968; Nott et al., 1976; Hayworth et al., 1980; O'Hara, 1980; ) nor racial context (Hayworth et al., 1980; O'Hara, 1980) were significantly related to levels of postpartum depression. It is not clear whether these studies had used samples drawn from population groups representing low socio-economic status, oppressed minority groups as was the case in the present study. Since the scope of this investigation did not cover a comparison between ethnic grouping and socio-economic status, these results must be viewed with regard to this possible limitation.

Furthermore, despite the finding that the pre- and post-partum scores on the Beck Depression Inventory correlated significantly, suggesting the reliability of this test, it is possible that this inventory is not an adequate measure of depression in this context. O'Hara and Zekoski (1988) have suggested that the Beck Depression Inventory contains items which are not specific measures of depression. Cox (1986) citing O'Hara et al (1984) concluded that

".... although significant associations were found between certain cognitive variables before pregnancy and postpartum BDI scores, these associations were not upheld when the Research Diagnostic Criteria for postnatal depression based on a clinical interview was the outcome variable" (pp17-18).



UNIVERSITY of the  
WESTERN CAPE

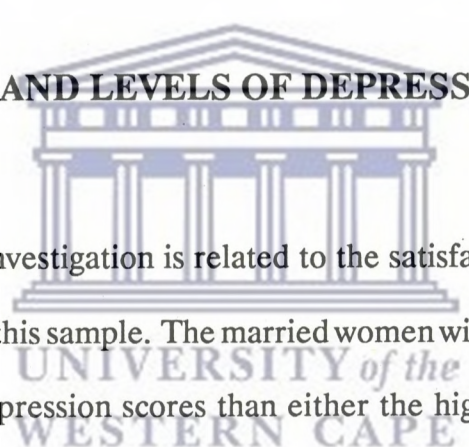
### **5.3. PERSONALITY ( NEUROTICISM) AND LEVELS OF DEPRESSION**

An interesting finding of this investigation was that with the event of birth, the depression scores amongst women rated high in neuroticism, decreased. This finding is not consistent with studies conducted by Watson et al. (1984) and Boyce et al. (1991) who found high neuroticism scores to be a predictor of postpartum depression in primiparae.

One of the characteristics of neuroticism is the anticipation of catastrophic events (Kaplan & Sadock, 1991). Decreases of depression scores across birth, for these women, suggests that the anticipation of the birth may have been negative when compared to the actual event.

The observation that the depression scores decreased in subjects with high neuroticism scores only after birth, and the observation that other groups vis. when marital status and neuroticism are differentially compared, failed to show increases in depression following birth, further supports the hypothesis that postpartum depression is not a separate entity, certainly within the sample employed in this investigation. This finding is supported by research conducted by Kumar and Robson (1984) who found high neuroticism to be associated with antenatal depression but not postpartum depression.

#### **5.4. SOCIAL SUPPORT AND LEVELS OF DEPRESSION**



A significant finding of this investigation is related to the satisfaction with social support experienced by the women in this sample. The married women with high satisfaction scores were found to have lower depression scores than either the high satisfaction unmarried women or the low satisfaction married and unmarried women. One interpretation of these results is that the positive psychological effect of the support of a marital relationship, accumulates with the positive psychological effect of high levels of social support. This accumulated effect may act as a buffer protecting a married woman against high levels of depression.

This would tend to indicate that where high levels of social support are experienced the legal and social status of marriage appears to be important. The fact that the unmarried group (irrespective of level of satisfaction with social support) and the married group with

low satisfaction with social support did not differ with respect to levels of depression, may suggest the need in future research to control for the effect of relationships per se on postpartum levels of depression.

The finding in this study is consistent with the findings in several studies that have evaluated the role of social support in reducing the risk for postpartum depression (Kumar & Robson, 1984; O'Hara, 1986; Whiffen, 1988; Whiffen et al., 1991).

## **5.5. LIFE EVENTS AND LEVELS OF DEPRESSION**

The results of the analysis of high and low frequency of significant negative life events are similar to the findings obtained in the analysis of satisfaction with social support. The married women who experienced fewer significant life events have lower levels of depression than either unmarried women who experienced fewer significant life events or, married and unmarried women who rated higher significant life events. The frequency of significant life events did not affect the unmarried women's depression scores. Interestingly, the married women with higher significant life events showed a tendency, albeit not significant, to show higher levels of depression. This suggests a tendency for married women in this sample to be more sensitive to the effects of significant life events. It can be reasoned that the responsibility of marriage and family may sensitise these women to the adverse effects of life events. By contrast, the significantly lower depression scores amongst married women with low significant life events in comparison with unmarried women with significant life events suggests that marriage may act as some form of protection. It is possible that this suggested protective effect may operate until the frequency of life events



reached some "critical mass". Of importance, however, is the observation that this suggested sensitivity to significant life events is independent of the postpartum experience.

The finding in this study that women who experienced fewer significant life events have lower levels of depression is consistent with the findings obtained by Paykel et al. (1980), O'Hara et al. (1983), O'Hara et al. (1984) and O'Hara et al. (1991).

## **5.6. SUMMARY OF RESULTS ON LEVELS OF DEPRESSION IN INTERACTION WITH RISK FACTORS.**

From the result obtained in this study, there is no evidence to support postpartum depression as a distinct syndrome. Therefore the hypothesis (H<sub>1</sub>) that levels of depression in primiparae increase in the postpartum period cannot be accepted. The results obtained in this study suggests that depression in this sample is a complex phenomenon related to social support, personality (neuroticism) and significant life events. With regard to personality (neuroticism), this can be viewed as a risk factor only in the context of high neuroticism and then only in anticipation of the birth event.

## 5.7. MATERNAL ADJUSTMENT AND ATTITUDE (MAMA)

Maternal adjustment and attitude before delivery did not change after the birth of the child, except in the married group. Here it increased after delivery. While this is in the expected direction, it was surprising that the married and unmarried group, overall, did not show a significant difference in their maternal adjustment and attitude. Little is known about the epidemiology of psychiatric disorders in the Black population groups in South Africa, in general (Parry, 1994) and specifically, little is known about the concept of maternal adjustment and attitude in these population groups. It is possible that the MAMA scale is not adequate, as a measure of maternal adjustment and attitude, in this sample group. It is only when maternal adjustment and attitude, as measured by the MAMA questionnaire reach high enough levels vis. after delivery in the married group, that it is able to distinguish between the married and unmarried groups. This reasoning is borne out by the result which indicated that, in this sample, the overall MAMA scores tended to be high. Interestingly, the frequency distribution of the MAMA scores, in the sample, described a normal distribution curve with a mean of 170 and a standard deviation of 18. The lowest score obtainable on the MAMA scale is 60 and the highest score is 240; which means that 64% of this sample lies above the midpoint (150) of the theoretical range of the MAMA scores. Kumar et. al. (1984) do not provide figures of the distribution of the MAMA scores of their samples with which to compare these results. However, one possibility that concerns future research is that, overall, the maternal adjustment and attitude, as measured by the MAMA questionnaire, of the women in this sample is high and that the married women, after delivery, may have demonstrated an increase above what is already a high maternal adjustment and attitude. Consequently, the MAMA questionnaire may not have

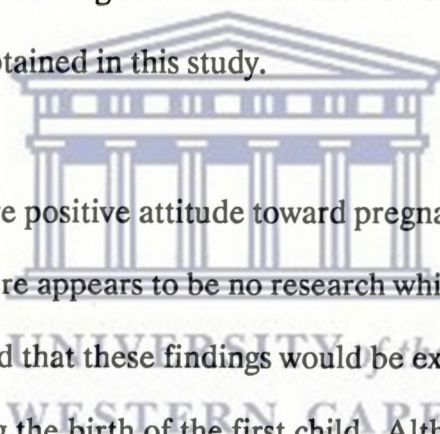
been sensitive enough to identify what is meant by maternal adjustment and attitude in this sample.

When examining the results of the analysis of the sub-scales, it was found that the attitude toward body image did not change significantly from the pre- to the post delivery period. This is an interesting finding, as changes in physical appearance have been linked to the likelihood of a crisis occurring in pregnant and postpartum women (Breen, 1975). What is important is how the woman feels about her body. In this study, it could be suggested that the self- concept of the women is inextricably linked to their attitude toward body image. Thus, it is possible that the positive identification with the maternal and nurturing role provides sufficient positive self-concept to override the results of body distortions due to pregnancy, at least in the early period following delivery.

There was a significant increase in attitude toward somatic symptoms after birth, which was not affected by marital status. When this sub-scale reflects a higher score it indicates a greater involvement with or experience of somatic symptoms. The finding in this study is congruous with descriptive literature of the postpartum period which emphasises an increase in somatic changes (Hopkins et al., 1984). Results obtained from a study conducted by O'Hara, Neunaber and Zekoski (1984) noted significantly higher levels of somatic symptoms 3-and 6 weeks postpartum.

The married women demonstrated a significantly more positive attitude towards relationships with their partners than did the unmarried women. Attitude toward relationships, however, showed a significant decrease after the birth of the child, indicating that mothers

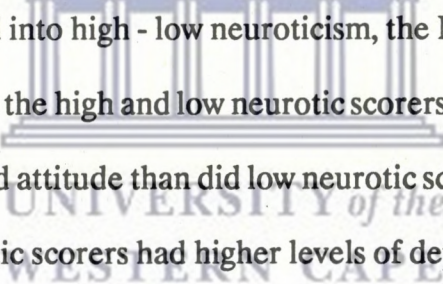
became more preoccupied with the baby than with the relationship with the partner. The finding in this study is supported by a study conducted by Friedman (1987), who found that married primiparae who experienced their marriage as gratifying and reported high marital satisfaction during pregnancy, had however, reported a marked decrease in their marital satisfaction over the transition to parenthood. Further support for this finding of decreased marital satisfaction after the birth of the child has been noted in the work of Leifer (1977) and Grossman et al. (1980). Grossman et al. (1980) go further in suggesting that the decline in marital satisfaction arises from, amongst other things, their new parental roles being in conflict with other roles, such as occupational commitment, which results in concentration on the baby at the expense of devoting more time to each other. This latter explanation, is in keeping with the result obtained in this study.



Married women showed a more positive attitude toward pregnancy and birth than did the unmarried women. While there appears to be no research which has specifically focused on this issue, it could be argued that these findings would be expected. Friedman (1987) points to the myth surrounding the birth of the first child. Although the actual birth may represent a crisis, in terms of the myth, the parental couple is created with the advent of birth and to that extent the expectant mother anticipates the "cementing" of her relationship with her spouse. This "cementing" means a change in roles for them both as they shift from a couple loosely attached through marriage and love to a couple bonded through the child. The pregnancy and a positive attitude towards pregnancy comes to symbolise this event. The unmarried mother cannot expect this event and consequently she would not be expected to have the same attitude towards pregnancy as would the married woman.

There was a significant decrease in attitude toward sex among the unmarried group after the birth of the child. Again Friedman's (1987) argument can be applied here. The unmarried woman is left after delivery without a "cemented relationship with a spouse". In other words, she faces the crisis of the new born child without the security and support of this relationship. Since sex was the event through which the pregnancy occurred it may come to symbolise her isolation. By the same token, in the married woman it may come to symbolise the union of the "parental couple".

#### **5.8. PERSONALITY (NEUROTICISM) AND LEVELS OF MATERNAL ADJUSTMENT AND ATTITUDE**



When the groups were divided into high - low neuroticism, the MAMA scale was sensitive enough to distinguish between the high and low neurotic scorers vis. the high neurotics had lower maternal adjustment and attitude than did low neurotic scorers. As in the case with depression, where high neurotic scorers had higher levels of depression as compared with lower neurotic scorers, this tends to suggest that neurosis is a "pathological state". In other words, neurosis tends to adversely affect maternal adjustment and attitude. To that extent it may be considered a risk factor to maternal adjustment and attitude.

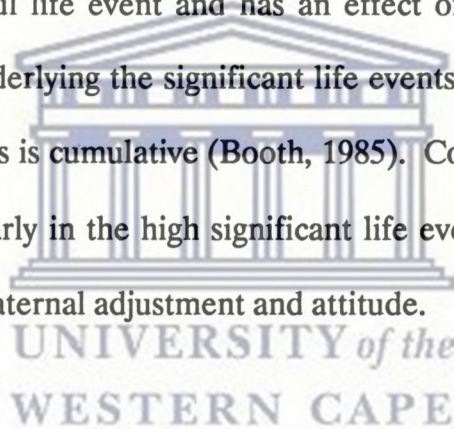
## 5.9. SOCIAL SUPPORT AND LEVELS OF MATERNAL ADJUSTMENT AND ATTITUDE

The social support findings confirm what would be expected, the married women with high social support show higher MAMA levels than other groups. These results would suggest that the effect of the support of a marital relationship, accumulates with the effect of high levels of social support. This accumulated effect may act to facilitate maternal adjustment and attitude in married women.

In this regard, it is important to note that prior to delivery all groups, irrespective of level of satisfaction with social support showed similar levels of maternal adjustment and attitude, with a tendency for low satisfaction groups to show higher maternal adjustment and attitude. After delivery it was the married group that showed higher levels of maternal adjustment and attitude irrespective of levels of satisfaction with social support. While further investigation is necessary, this result does not lend credence (as was the case with depression and levels of satisfaction with social support) to the suggestion that the legal and social consequences of marital status has an effect on levels of maternal adjustment and attitude which supersedes the effect of relationships per se.

## 5.10. LIFE EVENTS AND MATERNAL ADJUSTMENT AND ATTITUDE

The effect of significant life events on maternal adjustment and attitude was only found for the married women who experienced a low number of significant life events and then only after delivery. In their case levels of maternal adjustment and attitude increased after delivery. The observation that remaining groups failed to show any change across delivery irrespective of marital status or frequency of life events tends to suggest that the effects of the birth of the child does not reflect the effect of significant life events on maternal attitude and adjustment. This is surprising in view of Friedman's (1987) contention that the birth of the first child is a stressful life event and has an effect on postpartum adjustment. Furthermore, the theory underlying the significant life events concept suggests that the effect of significant life events is cumulative (Booth, 1985). Consequently, it would have been expected that, particularly in the high significant life events groups, some effect would have been noted on maternal adjustment and attitude.

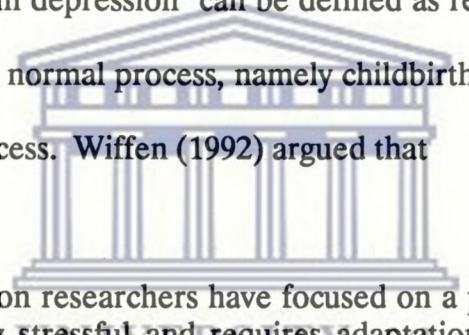


With respect to the low significant life events, married group it would appear that they behaved like the other groups only before delivery on the MAMA questionnaire. It is possible that this group anticipates the birth of the child as stressful which would account for their similarity to the high significant life event groups before delivery. When the birth of the child is not experienced as stressful, this results in an increase in maternal adjustment and attitude. Since the low significant life events, unmarried women did not behave in the same manner as the low significant life events, married group, this would suggest that marital status plays some part. Whatever the role of marital status, in relation to significant life events, it appears to be subtle and in need of further investigation.

## 5.11. SOCIAL IDENTITY THEORY AND POSTPARTUM ADJUSTMENT

The fact that the regression analysis failed to produce a model which would predict either depression or maternal adjustment and attitude is an indication that these risk factors did not play a substantive predictive role in either maternal adjustment and attitude or in depression. This suggests that other factors, which supersede these risk factors, are operating on maternal adjustment and attitude and depression. One important possibility is that offered by Social Identity Theory (Tajfel, 1981, Tajfel & Turner, 1979).

The literature on postpartum depression can be defined as research which attempts to focus on what is ostensibly a normal process, namely childbirth, and to find pathological sequelae related to this process. Wiffen (1992) argued that



"Postpartum depression researchers have focused on a period in women's lives that is normally stressful and requires adaptation. Childbirth is a striking example, but other periods come to mind: for instance, when married couples separate or employed persons retire. One would expect that rates of mild depression would also be elevated after these major life changes, and that the risk for depression would be greatest amongst people who have previously responded to life circumstances with depression. Researchers have not specifically identified the emotional upheaval accompanying these periods as "post-break-up depression" or "post-retirement depression". Most likely they do not think it would be useful to distinguish depressions occurring at these times from those occurring otherwise" (p505).

Fanon (1985) goes further, and has argued that pathology has to be defined within its socio-political context. It is the socio-political context which gives rise to both the pathology and its manifestation, and not the individual context which the medical model would suggest (Szaz, 1960).



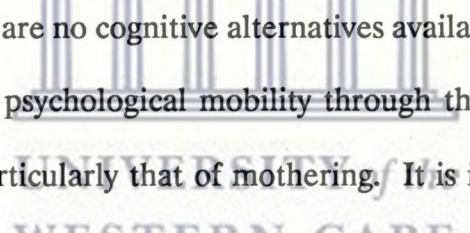
The group studied here do not conform to the research findings that have suggested the existence of postpartum depression. One interpretation of the discrepancy is the suggestion that this sample may be "better adjusted" with respect to pregnancy and child birth. As the sample was randomly selected, it is possible that this "better adjustment", is a characteristic of the population of women in the Mitchells Plain area. In any event the apparent better adjustment of this sample needs to be accounted for. The following model is proposed as a possible working model to account for this, and to suggest future lines of research into the relationship between postpartum adjustment and women in the South African context.

In keeping with Fanon's notion that mental health is related to socio-political contexts, Social Identity Theory (SIT) might suggest a way of understanding these results. The group of women in Mitchells Plain represents an oppressed minority group by virtue of their socio-economic standard and their designation to the "minority" social group of so-called 'coloured' people. Tajfel (1981) has suggested that the way that people categorise the group (social categorisation) to which they belong (in-group) as well a group to which they do not belong (out-group), is based on a cognitive or evaluative component and an emotional component. The cognitive or evaluative component ranges from positive to negative, and the emotional component ranges from like to hate. People who belong to a minority group in South Africa are likely to evaluate the in-group negatively in relation to the out-group viz. White which is evaluated positively. Consequently, since group membership becomes internalised as part of the self-concept, it is likely that members of a minority group that evaluates itself negatively, will have a negative self-concept. In such

a case, the desire to seek a positive self-concept tends to create a search for cognitive alternatives.

" Cognitive alternatives refer to perception that the status relations between groups are changeable to the extent that a complete reversal of existing status relations is conceivable" (De La Ray, in Foster & Louw-Potgieter, 1991, p. 45).

Where cognitive alternatives do not exist and social mobility from a low status group to a group with higher status is not possible, psychological mobility may occur (Tajfel, 1981). Psychological mobility is frequently expressed as the adoption of attitudes, behaviours and values associated with the higher status out-group.



It is possible that, since there are no cognitive alternatives available, the group of women of Mitchells Plain achieve a psychological mobility through the identification with the out-group woman's role - particularly that of mothering. It is important to note at this juncture that in the Cape, the 'coloured woman' historically has been associated with the caretaking of white women's children and their household. In addition Tajfel ( 1978,1981) has proposed that the process of social categorisation results in a more empathic accentuation of perceived intra-group similarities and perceived inter-group differences. It is conjectured here that the 'coloured' woman's identification with the out-group white woman's role, as a mother, and her own involvement with the caretaking of out-group children, results in the accentuation of the maternal characteristic. This maternal characteristic becomes both a salient feature of the 'coloured' woman's in-group identification as well as her means of psychological mobility. If this is so then it would possibly result in

a social identity based on the characteristic of mothering which would increase the positiveness of the self-concept. Consequently, one would then expect that when a woman from this population group fell pregnant, she might automatically embrace a positive social identity that would protect her from depression and may account for the high maternal adjustment found in this group.

Further research is needed along these lines which investigates the relationship between social identity and postpartum adjustment. It is suggested here that a negative social identity in the postpartum period may be the highest risk for postpartum depression.

Notwithstanding the above model, certain methodological issues need to be considered.

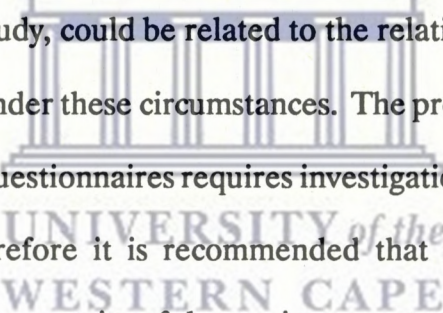


## **5.12. METHODOLOGICAL ISSUES**

### **5.12.1. SAMPLE SIZE**

The sample size used in this study, does not allow for the generalizability of the results. Future studies should increase the sample size, so as to allow for a more reliable result to be obtained.

### **5.12.2. INSTRUMENTS**



The results obtained in this study, could be related to the relative insensitivity of the BDI and MAMA questionnaires under these circumstances. The problem of the re-test effects for the BDI and the MAMA questionnaires requires investigation to determine the degree of this possible effect. Therefore it is recommended that an independent interview assessment of, for example the severity of depression symptoms, be conducted in future research, and that this be correlated with the BDI and other measures of depression.

Parry (1994) in his discussion on future directions of psychiatric epidemiology in South Africa, raises critical issues in the use of standardised psychiatric instruments which is of relevance to this study. He suggests that there are three major threats to the validity of psychiatric instruments when applied in South Africa. Firstly, there are cultural problems affecting the validity of psychiatric instruments when applied in cross cultural settings (Draguns, in Parry, 1994). Parry (1994) raises the problem regarding the confusion

between culturally distinctive behaviour and psychopathological manifestations of behaviour. Thus, it is essential that researchers obtain an understanding of abnormal behaviour patterns and the socio-cultural context within which such behaviour occurs (Parry, 1994). A second point relates to the translation of psychiatric tests from one language to another, which could affect the validity of studies. This occurs primarily because languages differ in the extent to which they allow for similar expression of inner distress, such as depression and anxiety.

A third threat to the validity of psychiatric investigations arises from a failure to assess the validity of the instruments, to calibrate them, and to assess their reliability in a cultural context.

Most of the instruments used in S.A. have been developed overseas. The validity of such instruments may be compromised through the application in a different context and through the translation process. It is therefore helpful to:

- a) conduct pilot studies comparing the results with assessments made by clinicians
- b) to compare the distribution of scores between normal and patient samples, and
- c) to pre-test the translation

### **5.12.3. SUBJECTS**

Certain subject characteristics need to be explored and controlled for. As this study focused on married women and women who were not married but in a relationship, it is recommended that future studies incorporate women who are not married and not in a relationship. This would provide a more reliable and accurate comparison between the married and unmarried groups.

In addition consideration needs to be given to comparisons between subjects of different population groups.

### **5.13. CONCLUSION AND RECOMMENDATIONS**



The research has looked at the association between levels of postpartum depression, maternal adjustment and attitude, with marital status, adverse life circumstances, social support and personality (neuroticism) as risk factors.

The nature of the results did not allow to draw positive conclusions about postpartum depression except that it does not exist in this sample. But with low depression and high maternal adjustment, it was felt that one possible interpretation of these results might be given by extending the argument to Social Identity theory. An area for future research has been proposed, which views social identity or the absence thereof as a risk factor for postpartum depression.

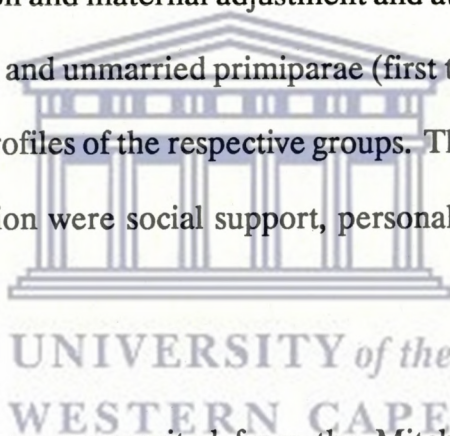
As has been suggested, the use of more sensitive questionnaires would possibly circumvent the relative insensitivity of the Beck Depression Inventory and the Maternal Adjustment and Attitude Questionnaire, employed in this study. A recommendation would be to conduct a pilot study of the many existing depression questionnaires in order to establish the most reliable and valid instrument applicable within the South African context.



# CHAPTER 6

## SUMMARY

The aim of the present study was to determine whether it was possible to identify changes in levels of postpartum depression and maternal adjustment and attitude in primiparae before and after birth. It aimed, furthermore, at assessing certain risk factors that could provide an understanding of the etiological factors (causes, determinants) influencing postpartum levels of depression and maternal adjustment and attitude. The study focused on risk factors among married and unmarried primiparae (first time mothers), with a view to establishing vulnerability profiles of the respective groups. The specific risk factors that formed part of the investigation were social support, personality (neuroticism) and life events.



All the subjects investigated were recruited from the Mitchells Plain Maternity and Obstetrics Unit. A sample of 70 subjects, in the third trimester of pregnancy, voluntarily participated in the first part of this study. Of these, 26 belonged to the married group and 44 belonged to the unmarried group. As a result of the attrition factor, 57 subjects constituted the final sample for analysis. The final sample comprised 20 married and 37 unmarried subjects. Subjects were followed up four to eight weeks postpartum.



The measurement instruments administered in the first part of this investigation were:

The Beck Depression Inventory (BDI)

Eysenck Personality Questionnaire (EPQ)

Maternal Adjustment and Attitude Questionnaire (MAMA)

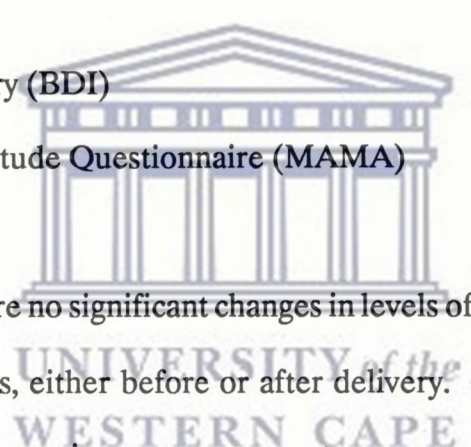
The Social Support Questionnaire (SSQ)

List of Threatening Life Events Questionnaire (LTE-Q)

The measurement instruments administered in the second part of the investigation were:

The Beck Depression Inventory (BDI)

Maternal Adjustment and Attitude Questionnaire (MAMA)



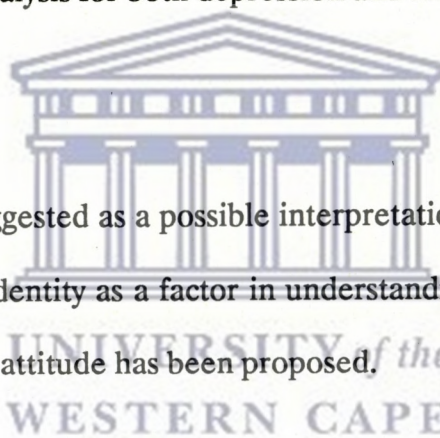
Results revealed that there were no significant changes in levels of depression between the married and unmarried groups, either before or after delivery. Of significance was that with the event of birth, the depression scores amongst women rated high in neuroticism decreased significantly. Married women with high social support satisfaction scores were found to have low depression scores. Similarly, married women who experienced fewer negative life events had lower levels of depression than did the unmarried women who experienced fewer negative life events.

The maternal adjustment and attitude scores did not change before or after birth, except in the married group. The married group showed a significant increase in scores on the maternal adjustment and attitude scores after the birth of the child. Regarding personality

(neuroticism), the high neuroticism scorers had significantly lower maternal adjustment and attitude than did the low neuroticism scorers. As was the case with social support and depression, married women with high social support had a higher maternal adjustment and attitude. A significant effect of negative life events on maternal adjustment and attitude was only found for the married women (after delivery) who experienced a low number of life events.

A stepwise multiple regression analysis was performed, in order to yield a model in which the depression and maternal adjustment and attitude scores would be predicted by risk factors. The finding of this analysis for both depression and maternal attitude and adjustment was not significant.

Social Identity theory was suggested as a possible interpretation of these results. Future research which views social identity as a factor in understanding postpartum depression and maternal adjustment and attitude has been proposed.



## REFERENCES

- Abramson, L.Y., Seligman, M.E.P. & Teasdale, J.D. (1978). Learned helplessness in humans: Critique and Reformulation. Journal of Abnormal Psychology, 87, 49-74.
- Akiskal, H.S., Bitar, A.H., Puzantian, L.H., Rosenthal, T.L. & Walter, P.W. (1983). Nosological Status of Neurotic Depression. Archives of General Psychiatry, 35, 756-766.
- American Psychiatric Association. (1987). Diagnostic and Statistical Manual of Mental Disorders, Washington DC, American Psychiatric Association.
- Ballinger, C.G., Buckley, D.E., Naylor, G.J. & Stansfield, D.A. (1979). Emotional Disturbance Following Childbirth: Clinical findings and urinary excretion of cyclic AMP. Psychological Medicine, 9, 293-300.
- Bebbington, P.E., Dean, C., Der, G., Hurry, J. & Tennant, C. (1991). Gender, Parity and the Prevalence of Minor Affective Disorder. British Journal of Psychiatry, 158, 40-45.
- Beck, A.T., Ward, C.H., Mendelson, M., Mock, J. & Erbaugh, J. (1961). An Inventory for Measuring Depression. Archives of General Psychiatry, 4, 561-571.
- Bech, P. (1992). Symptoms and assessment of depression. In, Paykel, E.S. (Ed.), Handbook of Affective Disorders. United Kingdom: Longman.
- Birtchnell, J. (1984). Dependence and its Relationship to Depression. British Journal of Medical Psychology, 57, 215 - 225.
- Blair, R.A., Gilmore, J.S., Playfair, H.R., Tisdall, M.W. & O'Shea, M.W. (1970). Puerperal Depression: A study of predictive factors. Journal of the Royal College of General Practitioners, 19, 22-25.
- Booth, A.L. (1985). Stressmanship. London: Severn House.

Boyce, P., Parker, G., Barnett, B., Cooney, M. & Smith, F. (1991). Personality as a Vulnerability Factor to Depression. British Journal of Psychiatry, 159, 106-114.

Braverman, J. & Roux, J.F. (1978). Screening for the Patient at Risk for Postpartum Depression. Obstetrics and Gynaecology, 52, 731-736.

Breen, D. (1975). The birth of a first child. London: Tavistock.

Brockington, I.F. & Roper, A. (1988). The nosology of puerperal mental illness: In, Brockington, I.F. & Kumar, R. (Eds.), Motherhood and mental illness. Great Britain: Butterworth.

Brown, G.W. & Harris, T. (1978). Social origins of depression. New York: The Free Press.

Brown, W.A. & Sherefsky, P. (1973). Seven Women: A prospective study of postpartum psychiatric disorders. Psychiatry, 35, 139-157.

Brugha, T.S. & Conroy, R. (1985). Categories of Depression: reported life events in a controlled design. British Journal of Psychiatry, 147, 641-647.

Brugha, T.S. & Cragg, D. (1990). The List of Threatening Experiences: the reliability and validity of a brief life events questionnaire. Acta Psychiatrica Scandinavica, 82, 77-81.

Central Statistical Services. (1991). Census, Report No. 03-01-11.

Chalmers, B. (1982). Early parenthood heaven or hell. Cape Town: Juta.

Chodoff, P. (1972). The Depressive Personality. Archives of General Psychiatry, 27, 666-667.

Cobb, J. (1980). Babyshock. London: Pilot.

Coppen, A. & Metcalfe, M. (1965). Effects of a Depressive Illness on MPI Scores. British Journal of Psychiatry, 11, 236-239.

- Cox, J.L. (1986). Post Natal Depression: A guide for health professionals. Singapore: Longman Singapore Publishers.
- Cox, J.L. (1992). Depression after childbirth. In, E.S. Paykel (Ed.), Handbook of affective disorders (2nd ed). United Kingdom, Longman.
- Cox, J.L., Connor, Y.M., Henderson, I., McGuire, R.J. & Kendall, R.E. (1983). Prospective Study of the Psychiatric Disorders of Childbirth by Self-Report Questionnaire. Journal of Affective Disorders, 5, 1-7.
- Cox, J.L., Holden, J.M. & Sagovsky, R. (1987). Detection of Postnatal Depression: development of the 10-item Edinburgh Postnatal Depression Scale. British Journal of Psychiatry, 150, 782-786.
- Cutrona, C.E. (1982). Non-Psychotic Postpartum Depression: A Review Of Recent Research. Clinical Psychology Review, 2, 487-583.
- Cutrona, C.E. (1983). Causal Attributions and Perinatal Depression. Journal of Abnormal Psychology, 92, 162-172.
- Dalton, K. (1971). Prospective Study into Puerperal Depression. British Journal of Psychiatry, 118, 689-692.
- De La Rey, C. (1991). Intergroup Relations: Theories and Positions. In, Foster, D. & Louw-Potgieter, J. (Eds.), Social psychology in South Africa. Johannesburg: Lexicon.
- Duncan, A.J. & Campbell, A.J. (1988). Antidepressant Drugs in the Elderly: are indications as long term as the treatment? British Medical Journal, 296, 1230-1232.
- Elliot, S.A., Rugg, A.J., Watson, J.P. & Brough, D.I. (1983). Mood Changes During Pregnancy and After Birth of a Child. British Journal of Clinical Psychology, 22, 295-308.
- Ephron, N. (1983). Heartburn. New York: Heineman.

- Erikson, E.H. (1968). Identity youth and crisis. New York: W.W.Norton.
- Eysenck, H.J. & Eysenck, S.B.G. (1975). Manual of the Eysenck Personality Questionnaire. Great Britain: Hodder and Stoughton.
- Fanon, F. (1967) Black skin, white masks. New York: Grove Press
- Feggetter, G. & Gath, D. (1981). Non-Psychotic Psychiatric Disorders in Women. Journal of Psychosomatic Research, 25, 369-372.
- Friedman, M. (1987). Developmental Changepoints: The Birth of a First Child. Unpublished doctoral thesis, University of the Witwatersrand.
- Gelder, M. (1978). Hormones and Postpartum Depression. In, M. Sandler (Ed.), Mental illness in pregnancy and the puerperium. Oxford: Oxford University Press.
- Goldberg, D. (1972). The detection Of psychiatric illness By Questionnaire. London: Oxford University Press.
- Goldstein, E.G.(1990). Borderline disorders: Clinical models and techniques. New York: Guildford Press.
- Gotlib, I.H., Whiffen, V.E., Wallace, P.M. & Mount, J.H.(1991). Prospective Investigation of Postpartum Depression: Factors involved in onset and recovery. Journal of Abnormal Psychology, 2, 122-132.
- Grossman, R.K. Eichler, L.S. & Winickoff, S.A. (1980). Pregnancy, birth and parenthood. Jossey-Bass: San Francisco.
- Gunderson, J.G. (1987). Interfaces between psychoanalytic and empirical studies of borderline personality. In, Grostein, J.S., Solomon, M.F. & Lang, J.A. (Eds.), The borderline patient. New Jersey: The Analytic Press.
- Handley, S.L., Dunn, T.L., Waldron, G. & Baker, J.M. (1980). Tryptophan, Cortisol and Puerperal Mood. British Journal of Psychiatry, 136, 493-508.

- Hapgood, C.C., Elkind, G.S. & Wright, J.J. (1988). Maternity Blues: phenomena and relationship to later postpartum depression. Australian and New Zealand Journal of Psychiatry, 22, 299-306.
- Hayworth, J., Little, B.C., Bonham Carter, J., Raptopoulos, P., Prest, Z.G. & Sandler, M. (1980). A Predictive Study Of Postpartum Depression: Some predisposing characteristics. British Journal of Medical Psychology, 53, 161-167.
- Hopkins, J., Marcus, M. & Campbell, S. (1984). Postpartum Depression: A critical review. Psychological Bulletin, 95, 498- 515.
- Herzog, A. & Detre, T. (1976). Psychotic Reactions Associated with Childbirth. Diseases of the Nervous System, 37, 229-235.
- Hirschfeld, R.M.A., Klerman, G.L., Clayton, P.J., Keller, M.B., McDonald-Scott, P. & Larkin, B.H. (1983). Assessing Personality: Effects of the Depressive State on Trait Measurement. American Journal of Psychiatry, 140, 695-699.
- Hirschfeld, R.M.A. & Cross, C.K. (1987). The Measurement of personality in depression. In, Marsella, A.J., Hirschfeld, R.M.A. & Katz, M.M. (Eds.), The measurement of depression. U.S.A.: John Wiley & Sons.
- Holmes, T.H. & Rahe, R.H. (1967). The Social Readjustment Scale. Journal of Psychosomatic Research, 11, 213-218.
- Howell, D.C. (1992). Statistical methods for psychology (3rd ed.). U.S., PWS-Kent.
- Kaplan, H.I. & Sadock, B.J. (1991). Synopsis of psychiatry. U.S.A.: Williams & Wilkins.
- Kennerley, H. & Gath, D. (1989). Maternity Blues. British Journal of Psychiatry, 155, 356-362.
- Kendell, R.E., Mackenzie, W.E., West, C., McGuire, R.J. & Cox, J.L. (1981). Day-to-Day Mood Changes after Childbirth: Further Data. British Journal of Psychiatry, 145, 620-625.

Kernberg, O.F. (1984). Severe personality disorders. New Haven: Yale University Press.

Kumar, R. & Robson, K.M. (1978). Neurotic Disturbance During Pregnancy and the Puerperium: Preliminary report of a prospective survey of 119 primiparae. In M. Sandler (Ed.), Mental Illness In Pregnancy And The Puerperium. Oxford: Oxford Medical Publications.

Kumar, R. & Robson, K.M. (1984). A Prospective Study Of Emotional Disorders in Childbearing Women. British Journal of Psychiatry, 144, 35-47.

Kumar, R., Robson, K.M. & Smith, A.M.R. (1984). Development of a Self-Administered Questionnaire To Measure Maternal Adjustment and Maternal Attitudes During Pregnancy And After Delivery. Journal of Psychosomatic Research, 28, 43-51.

Leifer, M. (1977). Psychological Changes Accompanying Pregnancy and Motherhood. Genetic Psychology Monographs, 95 (1), 55-96.

Martin, M.E. (1977). A Maternity Study of Psychiatric Illness Associated With Childbirth. Irish Journal of Medical Science, 146, 239-224.

Martin, C., Brown, G., Goldberg, D. & Brockington, I. (1989). Psychosocial Stress and Puerperal Depression. Journal of Affective Disorders, 16, 283-293.

Mueller, D. (1980). Social Networks: A promising direction for research on the relationship of the social environment to psychiatric disorder. Social Science and Medicine, 14, 147- 161.

Nilsson, A. & Almgren, P. (1970). Para-Natal Emotional Adjustment: A prospective investigation of 165 women. Acta Psychiatrica Scandanavica. Supplement 220.

Nott, P.N., Franklin, M., Armitage, D. & Gelder, M.G. (1976). Hormonal Changes and Mood in the Puerperium. British Journal of Psychiatry, 128, 379-383.

O'Hara, M.W. (1986). Social Support, Life Events, and Depression During Pregnancy and the Puerperium. Archives of General Psychiatry, 43, 596-573.



- O'Hara, M.W., Neunaber, D.J. & Zekoski, E.M. (1984). Prospective Study of Postpartum Depression: Prevalence, course, and predictive factors. Journal of Abnormal Psychology, 3, 158- 157.
- O'Hara, M.W., Rehm, L.P. & Campbell, S.B. (1982). Predicting Depressive Symptomatology: Cognitive-behavioural models and postpartum depression. Journal of Abnormal Psychology, 91, 457-461.
- O'Hara, M.W., Rehm, L.P. & Campbell, S.B. (1983). Postpartum Depression: A role for social network and life stress variables. Journal of Nervous and Mental Diseases, 171, 336- 431.
- O'Hara, M.W., Schlechte, J.A., Lewis, D.A. & Varner, M.W. (1991). Controlled Prospective Study of Postpartum Mood Disorders: Psychological, environmental, and hormonal variables. Journal of Abnormal Psychology, 100, 63-73.
- O'Hara, M.W. & Zekoski, E.M. (1988). Postpartum Depression: A comprehensive review. In, Brockington, I.F. & Kumar, R. (Eds.), Motherhood and mental illness. Great Britain: Butterworth & Co.
- O'Hara, M., Zekoski, E.M., Philipps, L. & Wright, E. (1990). Controlled Prospective Study of Postpartum Mood Disorders: Comparison of childbearing and non-childbearing women. Journal of Abnormal Psychology, 99, 3-15.
- Parry, C.D.H. (1994). Psychiatric Epidemiology in Africa: Future directions. Unpublished Manuscript, Medical Research Council, Cape Town.
- Paykel, E.S., Emms, E.M., Fletcher, J. & Rassaby, E.S. (1980). Life Events and Social Support in Puerperal Depression. British Journal of Psychiatry, 136, 339-346.
- Pitt, B. (1968). "Atypical" Depression Following Childbirth. British Journal of Psychiatry, 114, 1325-1335.
- Pitt, B. (1973). 'Maternity Blues'. British Journal of Psychiatry, 122, 431-433.
- Playfair, H.R. & Gowers, J.I. (1981). Depression Following Childbirth - a Search for Predictive Signs. Journal of the Royal College of General Practitioners, 31, 201-208.

- Rappaport, S. (1977). The Relationship Change Scale. In B.G. Geurney (Ed.), Relationship enhancement skill: Training programs for therapy prevention and enrichment. San Fransico: Jossey-Bass.
- Runyon, R.P. & Haber, A. (1977). Fundamentals of behavioural statistics, U.S., Addison-Wesley.
- Rutter, M. (1976). Research Report. Isle of Wight Studies, 1964-1974. Psychological Medicine, 6, 313-332.
- Sarason, I.G., Levine, H.M., Basham, R.B. & Sarason, B.R.(1983). Assessing Social Support: The Social Support Questionnaire. Journal of Personality and Social Psychology, 44, 127-139.
- Sharp, D.J. (1992). Postnatal Depression: A practical guide. Update, 3, 190-197.
- Spangenberg, J. & Pieters, H.C. (1990). Aetiological factors in postpartum depression. Unpublished paper, University of Stellenbosch.
- Spangenberg, J. & Pieters, H.C. (1991). Factors Related to Postpartum Depression. South African Journal of Psychology, 21(3), 159-165.
- Spangenberg, J. (1987). Etiologiese Aspekte van Postpartum Depressie. Unpublished Masters Thesis, University of Stellenbosch.
- Spitzer, R.L., Endicott, J. & Robins, E. (1978). Research Diagnostic Criteria: Rationale and reliability. Archives of General Psychiatry, 36, 773-782.
- Stein, G.S. (1980). The Pattern of Mental Change and Body Weight Change in the First Post-partum Week. Journal of Psychosomatic Research, 24, 165-171.
- Steer, R.A., Beck, A.T. & Garrison, B. (1986). Applications of the Beck Depression Inventory. In, Sartorius, N. & Ban, T.A. (Eds.), Assessment of depression. Germany: Springer-Verlag Berlin Heidelberg.
- Szasz, T.S. (1960). The Myth of Mental Illness. American Psychologist, 15, 113-118. ✓

- Tajfel, H. (1978). Differentiation between social groups. London: London Academic Press.
- Tajfel, H. (1981). Human groups and social categories. Cambridge: Cambridge University Press.
- Tajfel, H. & Turner, J. (1979). An Integrative Theory of Intergroup Relations. In, Austin, W.G., Worchel (Eds.), The Social psychology of intergroup relations. California: Brooks/Cole.
- Todd, E.O.M. & Edin, M.B. (1964). Puerperal Depression: A prospective epidemiological study. The Lancet, 2, 1264-1266.
- Troutman, B.R. & Cutrona, C.E. (1990). Non-Psychotic Postpartum Depression Among Adolescent Mothers. Journal of Abnormal Psychology, 99, 69-78.
- Watson, J.P., Elliot, S.A., Rugg, A.J. & Brough, D.I. (1984). Psychiatric Disorder in Pregnancy and the First Postnatal Year. British Journal of Psychiatry, 144, 453-362.
- Whiffen, V.E. (1988). Vulnerability to Postpartum Depression: A prospective multivariate study. Journal of Abnormal Psychology, 97, 467-474. ✓
- Whiffen, V.E. (1992). Is Postpartum Depression a Distinct Diagnosis? Clinical Psychology Review, 12, 485-508. ✓
- Whiffen, V.E. & Gotlib, I.H. (1993). Comparison of Postpartum and Nonpostpartum Depression: Clinical presentation, psychiatric history, and psychosocial functioning. Journal of Consulting and Clinical Psychology, 61, 485-494. ✓
- Wolkind, M., Keuk, S. & Chaves, L.P. (1976). Childhood Experiences and Psychosocial Status in Primiparous Women: Preliminary findings. British Journal of Psychiatry, 128, 391-396.
- Wolkind, M., Zajieck, E. & Ghodsian, M. (1980). Continuities in Maternal Depression. International Journal of Family Psychiatry, 1, 167-181.

World Health Organization. (1978). Manual of the International Classification of Diseases, Injuries and Causes of Death, ed. 9, revised. World Health Organization, Geneva.

Wrate, R., Rooney, A., Thomas, P. & Cox, J. (1985). Postnatal Depression and Child Development: A three year follow-up study. British Journal of Psychiatry, *146*, 622-627.

Zajack, E. & Wolkind, S. (1978). Emotional Difficulties in Married Women During and After the First Pregnancy. British Journal of Medical Psychology, *51*, 379-385.

Zung, W.W.K. (1965). A Self-rating Depression Scale. Archives of General Psychiatry, *12*, 63-70.



UNIVERSITY *of the*  
WESTERN CAPE

**APPENDIX A**

**BIOGRAPHICAL INFORMATION**



UNIVERSITY *of the*  
WESTERN CAPE

**Biographical information**

Date of interview \_\_\_\_\_

1. Name \_\_\_\_\_

2. Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2(a). Telephone:  
Home \_\_\_\_\_  
Work \_\_\_\_\_

3. Age \_\_\_\_\_

4. Marital Status (a) Married Ist marriage \_\_\_\_\_ 2nd marriage \_\_\_\_\_  
(b) Divorced \_\_\_\_\_ How long \_\_\_\_\_  
(c) Single \_\_\_\_\_  
(d) Unmarried and living with a partner \_\_\_\_\_ How long \_\_\_\_\_

5. If single who do you live with? \_\_\_\_\_

6. Employed \_\_\_\_\_ Unemployed \_\_\_\_\_

Occupation \_\_\_\_\_

7. Household size \_\_\_\_\_

8. Total family income from all sources \_\_\_\_\_

9. Relationship of people in household to you.

UNIVERSITY of the  
WESTERN CAPE

10. Was your pregnancy planned? Yes \_\_\_\_\_ No \_\_\_\_\_

11. For how long have you been pregnant? \_\_\_\_\_

12. On what date are you expected to deliver? \_\_\_\_\_

14. In your life have you ever had a period of two or more weeks in which you felt sad, blue, depressed or when you lost all interest in things that you care about and enjoyed?

Yes \_\_\_\_\_ No \_\_\_\_\_

Date of follow up \_\_\_\_\_

Arrangements for follow up:

**APPENDIX B**

**BECK DEPRESSION INVENTORY (BDI)**

I



UNIVERSITY *of the*  
WESTERN CAPE

Beck Inventory (English)

NAME \_\_\_\_\_

DATE \_\_\_\_\_

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling in **the past four weeks, including today**. Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

- 1     0     I do not feel sad.  
      1     I feel sad.  
      2     I am sad all the time and I can't snap out of it.  
      3     I am so sad or unhappy that I can't stand it.
- 2     0     I am not particularly discouraged about the future.  
      1     I feel discouraged about the future.  
      2     I feel I have nothing to look forward to.  
      3     I feel that the future is hopeless and that things cannot improve.
- 3     0     I do not feel like a failure.  
      1     I feel I have failed more than the average person.  
      2     As I look back on my life, all I can see is a lot of failures.  
      3     I feel I am a complete failure as a person.
- 4     0     I can get as much satisfaction out of things as I used to.  
      1     I don't enjoy things the way I used to.  
      2     I don't get real satisfaction out of anything anymore.  
      3     I am dissatisfied or bored with everything.
- 5     0     I don't feel particularly guilty.  
      1     I feel guilty a good part of the time.  
      2     I feel quite guilty most of the time.  
      3     I feel guilty all of the time.
- 6     0     I don't feel I am being punished.  
      1     I feel I may be punished.  
      2     I expect to be punished.  
      3     I feel I am being punished.



Beck Inventory (English)

---

- 7 0 I don't feel disappointed in myself.  
1 I am disappointed in myself.  
2 I am disgusted with myself.  
3 I hate myself.
- 8 0 I don't feel I am any worse than anybody else.  
1 I am critical of myself for my weaknesses or mistakes.  
2 I blame myself all the time for my faults.  
3 I blame myself for everything bad that happens.
- 9 0 I don't have any thoughts of killing myself.  
1 I have thoughts of killing myself, but I would not carry them out.  
2 I would like to kill myself.  
3 I would kill myself if I had the chance.
- 10 0 I don't cry anymore than usual.  
1 I cry more now than I used to.  
2 I cry all the time now.  
3 I used to be able to cry, but now I can't cry even though I want to.
- 11 0 I am no more irritated now than I ever am.  
1 I get annoyed or irritated more easily than I used to.  
2 I feel irritated all the time now.  
3 I don't get irritated at all by the things that used to irritate me.
- 12 0 I have not lost interest in other people.  
1 I am less interested in other people than I used to be.  
2 I have lost most of my interest in other people.  
3 I have lost all of my interest in other people.
- 13 0 I make decisions about as well as I ever could.  
1 I put off making decisions more than I used to.  
2 I have greater difficulty in making decisions than before.  
3 I can't make decisions at all anymore.
- 14 0 I don't feel I look any worse than I used to.  
1 I am worried that I am looking old or unattractive.  
2 I feel that there are permanent changes in my appearance that make me look unattractive.  
3 I believe that I look ugly.

Beck Inventory (English)

---

- 15    0    I can work about as well as before.  
      1    It takes an extra effort to get started at doing something.  
      2    I have to push myself very hard to do anything.  
      3    I can't do any work at all.
- 16    0    I can sleep as well as usual.  
      1    I don't sleep as well as I used to.  
      2    I wake up one to two hours earlier than usual and find it hard to get back to sleep.  
      3    I wake up several hours earlier than I used to and cannot get back to sleep.
- 17    0    I don't get more tired than usual.  
      1    I get tired more easily than I used to.  
      2    I get tired from doing almost anything.  
      3    I am too tired to do anything.
- 18    0    My appetite is no worse than usual.  
      1    My appetite is not as good as it used to be.  
      2    My appetite is much worse now.  
      3    I have no appetite at all anymore.
- 19    0    I haven't lost much weight, if any lately.  
      1    I have lost more than 2.5 kg (5 lbs).  
      2    I have lost more than 5 kg (10 lbs).  
      3    I have lost more than 7.5 kg (15 lbs).  
(I am purposely trying to lose weight by eating less. Yes \_\_\_\_\_ No \_\_\_\_\_)
- 20    0    I am no more worried about my health than usual.  
      1    I am worried about physical problems such as aches and pains; or upset stomach; or constipation.  
      2    I am very worried about physical problems and it's hard to think of much else.  
      3    I am so worried about physical problems, that I cannot think about anything else.
- 21    0    I have not noticed any recent change in my interest in sex.  
      1    I am less interested in sex than I used to be.  
      2    I am much less interested in sex now.  
      3    I have lost interest in sex completely.

Beck Inventory Follow Up (English)

NAME \_\_\_\_\_

DATE \_\_\_\_\_

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling in **the past four weeks, including today**. Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

- 1     0     I do not feel sad.  
      1     I feel sad.  
      2     I am sad all the time and I can't snap out of it.  
      3     I am so sad or unhappy that I can't stand it.
- 2     0     I am not particularly discouraged about the future.  
      1     I feel discouraged about the future.  
      2     I feel I have nothing to look forward to.  
      3     I feel that the future is hopeless and that things cannot improve.
- 3     0     I do not feel like a failure.  
      1     I feel I have failed more than the average person.  
      2     As I look back on my life, all I can see is a lot of failures.  
      3     I feel I am a complete failure as a person.
- 4     0     I can get as much satisfaction out of things as I used to.  
      1     I don't enjoy things the way I used to.  
      2     I don't get real satisfaction out of anything anymore.  
      3     I am dissatisfied or bored with everything.
- 5     0     I don't feel particularly guilty.  
      1     I feel guilty a good part of the time.  
      2     I feel quite guilty most of the time.  
      3     I feel guilty all of the time.
- 6     0     I don't feel I am being punished.  
      1     I feel I may be punished.  
      2     I expect to be punished.  
      3     I feel I am being punished.

Beck Inventory Follow Up (English)

---

- 7    0    I don't feel disappointed in myself.  
      1    I am disappointed in myself.  
      2    I am disgusted with myself.  
      3    I hate myself.
- 8    0    I don't feel I am any worse than anybody else.  
      1    I am critical of myself for my weaknesses or mistakes.  
      2    I blame myself all the time for my faults.  
      3    I blame myself for everything bad that happens.
- 9    0    I don't have any thoughts of killing myself.  
      1    I have thoughts of killing myself, but I would not carry them out.  
      2    I would like to kill myself.  
      3    I would kill myself if I had the chance.
- 10   0    I don't cry anymore than usual.  
      1    I cry more now than I used to.  
      2    I cry all the time now.  
      3    I used to be able to cry, but now I can't cry even though I want to.
- 11   0    I am no more irritated now than I ever am.  
      1    I get annoyed or irritated more easily than I used to.  
      2    I feel irritated all the time now.  
      3    I don't get irritated at all by the things that used to irritate me.
- 12   0    I have not lost interest in other people.  
      1    I am less interested in other people than I used to be.  
      2    I have lost most of my interest in other people.  
      3    I have lost all of my interest in other people.
- 13   0    I make decisions about as well as I ever could.  
      1    I put off making decisions more than I used to.  
      2    I have greater difficulty in making decisions than before.  
      3    I can't make decisions at all anymore.
- 14   0    I don't feel I look any worse than I used to.  
      1    I am worried that I am looking old or unattractive.  
      2    I feel that there are permanent changes in my appearance that make me look unattractive.  
      3    I believe that I look ugly.

Beck Inventory Follow Up (English)

---

- 15    0    I can work about as well as before.  
      1    It takes an extra effort to get started at doing something.  
      2    I have to push myself very hard to do anything.  
      3    I can't do any work at all.
- 16    0    I can sleep as well as usual.  
      1    I don't sleep as well as I used to.  
      2    I wake up one to two hours earlier than usual and find it hard to get back to sleep.  
      3    I wake up several hours earlier than I used to and cannot get back to sleep.
- 17    0    I don't get more tired than usual.  
      1    I get tired more easily than I used to.  
      2    I get tired from doing almost anything.  
      3    I am too tired to do anything.
- 18    0    My appetite is no worse than usual.  
      1    My appetite is not as good as it used to be.  
      2    My appetite is much worse now.  
      3    I have no appetite at all anymore.
- 19    0    I haven't lost much weight, if any lately.  
      1    I have lost more than 2.5 kg (5 lbs).  
      2    I have lost more than 5 kg (10 lbs).  
      3    I have lost more than 7.5 kg (15 lbs).  
(I am purposely trying to lose weight by eating less. Yes \_\_\_\_\_ No \_\_\_\_\_)
- 20    0    I am no more worried about my health than usual.  
      1    I am worried about physical problems such as aches and pains; or upset stomach; or constipation.  
      2    I am very worried about physical problems and it's hard to think of much else.  
      3    I am so worried about physical problems, that I cannot think about anything else.
- 21    0    I have not noticed any recent change in my interest in sex.  
      1    I am less interested in sex than I used to be.  
      2    I am much less interested in sex now.  
      3    I have lost interest in sex completely.

Naam \_\_\_\_\_ Datum \_\_\_\_\_

In hierdie vraelys is groepe stellings. Lees asseblief elke groep sorgvuldig deur. Kies dan die een in elke groep wat die beste sal beskryf hoe jy **die laaste vier weeke, vandag ingesluit**, gevoel het. Maak 'n kring om die nommer teenoor die stelling wat jy gekies het. As verskeie stellings in die groep in gelyke mate van toepassing is, maak 'n kring om elke. Maak seker dat jy al die stellings in elke groep lees voor jy jou keuse maak.

- 1    0    Ek voel nie treurig nie.  
       1    Ek voel treurig.  
       2    Ek is gedurig treurig en kan die gevoel nie afskud nie.  
       3    Ek is so treurig of ongelukkig dat ek dit nie kan verdra nie.
- 2    0    Ek is nie besonders oor die toekoms ontmoedig nie.  
       1    Ek voel ontmoedig oor die toekoms.  
       2    Ek voel ek het niks om na uit te sien nie.  
       3    Ek voel die toekoms is hopeloos en dat sake nie kan verbeter nie.
- 3    0    Ek voel nie soos 'n mislukkeling nie.  
       1    Ek voel ek het meer as die gewone mens misluk.  
       2    As ek op my lewenspad terugkyk, al wat ek kan sien, is 'n klomp mislukkings.  
       3    Ek voel ek is 'n volkome mislukkeling as persoon.
- 4    0    Ek put uit net soveel bevrediging uit dinge soos in die verlede.  
       1    Ek geniet nie dinge soos voorheen nie.  
       2    Ek put nie ware bevrediging uit enigiets meer nie.  
       3    Ek is met alles ontvrede of verveeld.
- 5    0    Ek voel nie besonders skuldig nie.  
       1    Ek voel 'n groot deel van die tyd skuldig.  
       2    Ek voel taamlik skuldig, meeste van die tyd.  
       3    Ek voel al die tyd skuldig.
- 6    0    Ek voel nie dat ek gestraf word nie.  
       1    Ek voel ek mag gestraf word.  
       2    Ek verwag om gestraf te word.  
       3    Ek voel ek is gestraf.
- 7    0    Ek voel nie in myself teleurgesteld nie.  
       1    Ek is in myself teleurgesteld.  
       2    Ek walg myself.  
       3    Ek haat myself.

- 8    0    Ek voel nie ek is enigsins erger as enigeen anders nie.  
      1    Ek is krities teenoor myself vir my swakhede of foute.  
      2    Ek verwyт myself gedurig vir my foute.  
      3    Ek verwyт myself vir alles sleg wat gebeur.
- 9    0    Ek het geen gedagtes om myself dood te maak nie.  
      1    Ek het gedagtes om myself dood te maak, maar ek sal dit nie uitvoer nie.  
      2    Ek sal nie myself graag dood wil maak.  
      3    Ek sou myself dood maak as ek die kans gehad het.
- 10   0    Ek huil nie meer as wat normaal is nie.  
      1    Ek huil meer nou as wat ek voorheen gedoen het.  
      2    Ek huil nou al die tyd.  
      3    Ek kon gehuil het, maar nou kan ek nie, selfs wanneer ek wil huil.
- 11   0    Ek is nou nie meer geirriteerd dan wat ek voorheen was nie.  
      1    Ek word gouer vererg of geirriteerd dan wat voorheen die geval was.  
      2    Ek voel nou al die tyd geirriteerd.  
      3    Ek word glad nie deur al die dinge wat my voorheen geirriteer het, nou geirriteer nie.
- 12   0    Ek het nie belangstelling in ander mense verloor nie.  
      1    Ek is minder in ander mense geïntereeseerd as wat ek voorheen was.  
      2    Ek het die meeste van my belangstelling in ander mense verloor.  
      3    Ek het al my belangstelling in ander mense verloor.
- 13   0    Ek neem altyd so goed soos altyd besluite.  
      1    Ek stel die neem van besluite uit meer as was ek dit voorheen gedoen het.  
      2    Dis nou moeilike om besluite te neem as wat voorheen die geval was.  
      3    Ek kan glad nie meer besluite neem nie.
- 14   0    Ek voel nie my voorkoms is enigsins swakker as wat dit voorheen was.  
      1    Ek is bekommerd dat ek oud en onaantreklik lyk.  
      2    Ek voel dat daar is permanente veranderings in my voorkoms is, en dit maak my onaantreklik.  
      3    Ek voel dat ek lelik of afstootlik lyk.
- 15   0    Ek kan omtrent net so goed werk as voorheen.  
      1    Dit neem ekstra inspanning om te begin met iets.  
      2    Ek moet myself geweldig motiveer om enigiets te doen.  
      3    Ek kan glad nie enige werk doen nie.

- 16    0    Ek kan so goed slaap soos gewoonlik.  
      1    Ek slaap nie so goed soos voorheen nie.  
      2    Ek skrik een tot twee ure vroer wakker as gewoonlik en vind dit moeilik om weer aan die slaap te raak.  
      3    Ek skrik etlike ure vroer wakker as gewoonlik en kan dan nie weer aan die slaap raak nie.
- 17    0    Ek word nie meer as gewoonlik moeg nie.  
      1    Ek word makliker as gewoonlik moeg.  
      2    Ek word moeg van amper enige ding doen.  
      3    Ek is te moeg om enigiets te doen.
- 18    0    My eetlus is nie swakker as normaal nie.  
      1    My eetlus is nie so goed as was dit gewees het nie.  
      2    My eetlus is nou baie swakker.  
      3    Ek het geheel en al geen eetlus nie meer nie.
- 19    0    Ek het nie veel gewig, indien enige onlangs verloor nie.  
      1    Ek het meer as 2,5 kg (5pond) verloor.  
      2    Ek het meer as 5 kg (10 pond) verloor.  
      3    Ek het meer as 7,5 kg (15 pond) verloor.  
(Ek probeer met opset gewig verloor deur minde to eet.    Ja \_\_\_\_\_    Nee \_\_\_\_\_)
- 20    0    Ek is nie meer as gewoonlik oor my gesondheid ontsteld nie.  
      1    Ek is oor liggaamlike probleme soos pyne; of onstelde maag; of hardlywigheid, bekommerd.  
      2    Ek is baie oor liggaamlike probleme bekommerd en dis moeilik om oor iets anders te dink.  
      3    Ek is so oor my liggaamlike probleme bekommerd, dat ek nie oor iets anders kan dink nie.
- 21    0    Ek het nie enige onlangse verandering in my belangstelling in seks opgelet nie.  
      1    Ek is minder in seks geïnteresseerd as wat ek voorheen wás.  
      2    Ek is nou baie minder in seks geïnteresseerd.  
      3    Ek het geheel en al belangstelling in seks verloor.



Naam \_\_\_\_\_ Datum \_\_\_\_\_

In hierdie vraelys is groepe stellings. Lees asseblief elke groep sorgvuldig deur. Kies dan die een in elke groep wat die beste sal beskryf hoe jy **die laaste vier weeke, vandag ingesluit**, gevoel het. Maak 'n kring om die nommer teenoor die stelling wat jy gekies het. As verskeie stellings in die groep in gelyke mate van toepassing is, maak 'n kring om elke. Maak seker dat jy al die stellings in elke groep lees voor jy jou keuse maak.

- 1      0      Ek voel nie treurig nie.  
          1      Ek voel treurig.  
          2      Ek is gedurig treurig en kan die gevoel nie afskud nie.  
          3      Ek is so treurig of ongelukkig dat ek dit nie kan verdra nie.
- 2      0      Ek is nie besonders oor die toekoms ontmoedig nie.  
          1      Ek voel ontmoedig oor die toekoms.  
          2      Ek voel ek het niks om na uit te sien nie.  
          3      Ek voel die toekoms is hopeloos en dat sake nie kan verbeter nie.
- 3      0      Ek voel nie soos 'n mislukkeling nie.  
          1      Ek voel ek het meer as die gewone mens misluk.  
          2      As ek op my lewenspad terugkyk, al wat ek kan sien, is 'n klomp mislukkings.  
          3      Ek voel ek is 'n volkome mislukkeling as persoon.
- 4      0      Ek put uit net soveel bevrediging uit dinge soos in die verlede.  
          1      Ek geniet nie dinge soos voorheen nie.  
          2      Ek put nie ware bevrediging uit enigiets meer nie.  
          3      Ek is met alles ontvrede of verveeld.
- 5      0      Ek voel nie besonders skuldig nie.  
          1      Ek voel 'n groot deel van die tyd skuldig.  
          2      Ek voel taamlik skuldig, meeste van die tyd.  
          3      Ek voel al die tyd skuldig.
- 6      0      Ek voel nie dat ek gestraf word nie.  
          1      Ek voel ek mag gestraf word.  
          2      Ek verwag om gestraf te word.  
          3      Ek voel ek is gestraf.
- 7      0      Ek voel nie in myself teleurgesteld nie.  
          1      Ek is in myself teleurgesteld.  
          2      Ek walg myself.  
          3      Ek haat myself.

- 8 0 Ek voel nie ek is enigsins erger as enigeen anders nie.  
1 Ek is krities teenoor myself vir my swakhede of foute.  
2 Ek verwyf myself gedurig vir my foute.  
3 Ek verwyf myself vir alles sleg wat gebeur.
- 9 0 Ek het geen gedagtes om myself dood te maak nie.  
1 Ek het gedagtes om myself dood te maak, maar ek sal dit nie uitvoer nie.  
2 Ek sal nie myself graag dood wil maak.  
3 Ek sou myself dood maak as ek die kans gehad het.
- 10 0 Ek huil nie meer as wat normaal is nie.  
1 Ek huil meer nou as wat ek voorheen gedoen het.  
2 Ek huil nou al die tyd.  
3 Ek kon gehuil het, maar nou kan ek nie, selfs wanneer ek wil huil.
- 11 0 Ek is nou nie meer geirriteerd dan wat ek voorheen was nie.  
1 Ek word gouer vererg of geirriteerd dan wat voorheen die geval was.  
2 Ek voel nou al die tyd geirriteerd.  
3 Ek word glad nie deur al die dinge wat my voorheen geirriteer het, nou geirriteer nie.
- 12 0 Ek het nie belangstelling in ander mense verloor nie.  
1 Ek is minder in ander mense geïntereeserd as wat ek voorheen was.  
2 Ek het die meeste van my belangstelling in ander mense verloor.  
3 Ek het al my belangstelling in ander mense verloor.
- 13 0 Ek neem altyd so goed soos altyd besluite.  
1 Ek stel die neem van besluite uit meer as was ek dit voorheen gedoen het.  
2 Dis nou moeilik om besluite te neem as wat voorheen die geval was.  
3 Ek kan glad nie meer besluite neem nie.
- 14 0 Ek voel nie my voorkoms is enigsins swakker as wat dit voorheen was.  
1 Ek is bekommerd dat ek oud en onaantreklik lyk.  
2 Ek voel dat daar is permanente veranderings in my voorkoms is, en dit maak my onaantreklik.  
3 Ek voel dat ek lelik of afstootlik lyk.
- 15 0 Ek kan omtrent net so goed werk as voorheen.  
1 Dit neem ekstra inspanning om te begin met iets.  
2 Ek moet myself geweldig motiveer om enigiets te doen.  
3 Ek kan glad nie enige werk doen nie.

- 16 0 Ek kan so goed slaap soos gewoonlik.  
1 Ek slaap nie so goed soos voorheen nie.  
2 Ek skrik een tot twee ure vroer wakker as gewoonlik en vind dit moeilik om weer aan die slaap te raak.  
3 Ek skrik etlike ure vroer wakker as gewoonlik en kan dan nie weer aan die slaap raak nie.
- 17 0 Ek word nie meer as gewoonlik moeg nie.  
1 Ek word makliker as gewoonlik moeg.  
2 Ek word moeg van amper enige ding doen.  
3 Ek is te moeg om enigiets te doen.
- 18 0 My eetlus is nie swakker as normaal nie.  
1 My eetlus is nie so goed as was dit gewees het nie.  
2 My eetlus is nou baie swakker.  
3 Ek het geheel en al geen eetlus nie meer nie.
- 19 0 Ek het nie veel gewig, indien enige onlangs verloor nie.  
1 Ek het meer as 2,5 kg (5 pond) verloor.  
2 Ek het meer as 5 kg (10 pond) verloor.  
3 Ek het meer as 7,5 kg (15 pond) verloor.  
(Ek probeer met opset gewig verloor deur minde te eet. Ja \_\_\_ Nee \_\_\_)
- 20 0 Ek is nie meer as gewoonlik oor my gesondheid ontsteld nie.  
1 Ek is oor liggaamlike probleme soos pyne, of onstelde maag; of hardlywigheid, bekommerd.  
2 Ek is baie oor liggaamlike probleme bekommerd en dis moeilik om oor iets anders te dink.  
3 Ek is so oor my liggaamlike probleme bekommerd, dat ek nie oor iets anders kan dink nie.
- 21 0 Ek het nie enige onlangse verandering in my belangstelling in seks opgelet nie.  
1 Ek is minder in seks geïnteresseerd as wat ek voorheen wás.  
2 Ek is nou baie minder in seks geïnteresseerd.  
3 Ek het geheel en al belangstelling in seks verloor.

**APPENDIX C**

**MATERNAL ADJUSTMENT AND ATTITUDE QUESTIONNAIRE (MAMA)**



UNIVERSITY *of the*  
WESTERN CAPE

## Maternal Adjustment Questionnaire (English)

Please complete each question by putting a circle around the answer which most closely applies to you. Work quickly and please remember to answer each question. We want to know how *you* have been feeling during the past *month*. If you have not considered some of the questions during the past month, go ahead and answer them on your present feelings.

Here are some examples of completed questions:

Have you felt faint or dizzy?	Never	Rarely	Often	Very often
Have you felt proud of your appearance?	Very much	A lot	A little	Not at all

All the information will be treated in strict confidence.

### IN THE PAST MONTH.

- |   |            |          |        |            |
|---|------------|----------|--------|------------|
| 1. Have you got out of breath easily?   | Very often | Often    | Rarely | Never      |
| 2. Have you felt attractive?  | Never      | Rarely   | Often  | Very Often |
| 3. Have there been tensions between you and your partner-irritability, unpleasant silence, etc? | Never      | Rarely   | Often  | Very often |
| 4. Have you been perspiring a lot?  | Never      | Rarely   | Often  | Very often |
| 5. Have you found your partner sexually desirable?  | Never      | Rarely   | Often  | Very often |
| 6. Have you vomited?  | Never      | Rarely   | Often  | Very often |
| 7. Have you been worrying that you might not be a good mother?                                  | Not at all | A little | A lot  | Very much  |
| 8. Have arguments between you and your partner come close to blows?                             | Very often | Often    | Rarely | Never      |
| 9. Have you felt faint or dizzy?  | Never      | Rarely   | Often  | Very often |
| 10. Have you been worrying about hurting your baby inside you?                                  | Not at all | A little | A lot  | Very much  |
| 11. Do you think your partner has found you sexually desirable?                                 | Very often | Often    | Rarely | Never      |
| 12. Have you felt that you smelt nice?  | Never      | Rarely   | Often  | Very often |
| 13. Have you looked forward to having sexual intercourse?                                       | Not at all | A little | A lot  | Very Much  |
| 14. Has it worried you that you may not have any time to yourself once your baby is born?       | Not at all | A little | A lot  | Very much  |
| 15. Have you found it easy to show affection to your partner?                                   | Very often | Often    | Rarely | Never      |

Maternal Adjustment Questionnaire (English)

16. Have you regretted being pregnant?	Never	Rarely	Often	Very often
17. Have you experienced tingling sensations in your breasts?	Very often	Often	Rarely	Never
18. Have you felt that your breasts were too small?	Not at all	A little	A lot	Very much
19. Have you liked the shape of your body?	Not at all	A little	A lot	Very much
20. Have you felt shy about sex?	Very much	A lot	A little	Not at all
21. Have you felt that your face was attractive?	Not at all	A little	A lot	Very much
22. Has the thought of wearing maternity clothes appealed to you?	Very much	A lot	A little	Not at all
23. Have you felt that sexual intercourse might be less private because there is a baby inside you?	Very much	A lot	A little	Not at all
24. Have you been feeling happy that you are pregnant?	Not at all	A little	A lot	Very much
25. Have you enjoyed kissing and petting?	Very much	A lot	A little	Not at all
26. Has your partner helped you in the running of the house?	Very much	A lot	A little	Not at all
27. Have you suffered from constipation?	Never	Rarely	Often	Very often
28. Has the thought of having several children appealed to you?	Not at all	A little	A lot	Very much
29. Have you felt that pregnancy was unpleasant?	Very much	A lot	A little	Not at all
30. Have you been wondering whether having sexual intercourse might be harmful for the baby?	Not at all	A little	A lot	Very much
31. Have you felt your breasts were too big?	Not at all	A little	A lot	Very much
32. Have you felt full of energy?	Very often	Often	Rarely	Never
33. Have your ankles swollen up?	Very often	Often	Rarely	Never
34. Have you felt your partner was paying you too little attention?	Very often	Often	Rarely	Never
35. Have you felt wide awake in the daytime?	Very often	Often	Rarely	Never
36. Has your partner seemed to ignore how you were feeling?	Very often	Often	Rarely	Never
37. Has your partner tried to share your interests?	Never	Rarely	Often	Never
38. Have you suffered from indigestion or heartburn?	Never	Rarely	Often	Never
39. Have you felt tense and unhappy at the thought of sexual intercourse?	Never	Rarely	Often	Never
40. Have you been looking forward to catering for your baby's needs?	Not at all	A little	A lot	Very much
41. Have you felt nauseated (felt sick)?	Very often	Often	Rarely	Never
42. Have you felt that sex was unpleasant?	Very much	A lot	A little	Not at all

Maternal Adjustment Questionnaire (English)

43. Have you felt that your partner went out too often without you?	Never	Rarely	Often	Very often
44. Have you felt proud of your appearance?	Very much	A lot	A little	Not at all
45. Have you felt you were easily aroused sexually?	Never	Rarely	Often	Very often
46. Have you been having pleasurable daydreams about sex?	Very often	Often	Rarely	Never
47. Have you felt that your body was soft and cuddly?	Very much	A lot	A little	Not at all
48. Have you been feeling close to your partner since you became pregnant?	Never	Rarely	Often	Very often
49. Have you felt ungainly?	Very much	A lot	A little	Not at all
50. Have you felt like putting your arms round your partner and cuddling him?	Very much	A lot	A little	Not at all
51. Have you been wondering whether your baby will be healthy and normal?	Not at all	A little	A lot	Very much
52. Has your partner shown affection to you?	Very often	Often	Rarely	Never
53. Have you felt that your complexion was poor?	Very much	A lot	A little	Not at all
54. Have you felt that life will be more difficult after the baby is born?	Not at all	A little	A lot	Very much
55. Have you felt that your breasts were attractive?	Not at all	A little	A lot	Very much
56. Have you wished you could rely more on your partner to look after you?	Very often	Often	Rarely	Never
57. Have you felt that you were too fat?	Very much	A lot	A little	Not at all
58. Have you wanted to have sexual intercourse?	Not at all	A little	A lot	Very much
59. Have you enjoyed your food?	Very much	A lot	A little	Not at all
60. Has the thought of breast-feeding your baby appealed to you?	Not at all	A little	A lot	Very much

Maternal Adjustment Questionnaire Follow Up (English)

---

Name.....

Today's date..... Date baby was born.....

How many weeks since your baby was born?.....

Please complete each question by putting a circle around the answer which most closely applies to you. Work quickly and please remember to answer each question. We want to know how *you* have been feeling during the past *two weeks*. If you have not considered some of the questions during the past, two weeks go ahead and answer them on your present feelings.

Here are some examples of completed questions:

Have you felt faint or dizzy?	Never	Rarely	Often	Very often
Have you felt proud of your appearance?	Very much	A lot	A little	Not at all

All the information will be treated in strict confidence.

IN THE PAST TWO WEEKS.

- |   |            |          |        |            |
|---|------------|----------|--------|------------|
| 1. Have you got out of breath easily?   | Very often | Often    | Rarely | Never      |
| 2. Have you felt attractive?  | Never      | Rarely   | Often  | Very Often |
| 3. Have there been tensions between you and your partner-irritability, unpleasant silence, etc? | Never      | Rarely   | Often  | Very often |
| 4. Have you been perspiring a lot?  | Never      | Rarely   | Often  | Very often |
| 5. Have you found your partner sexually desirable?  | Never      | Rarely   | Often  | Very often |
| 6. Have you vomited?  | Never      | Rarely   | Often  | Very often |
| 7. Have you been worrying that you might not be a good mother?                                  | Not at all | A little | A lot  | Very much  |
| 8. Have arguments between you and your partner come close to blows?                             | Very often | Often    | Rarely | Never      |
| 9. Have you felt faint or dizzy?  | Never      | Rarely   | Often  | Very often |
| 10. Have you worried about hurting your baby ?  | Not at all | A little | A lot  | Very much  |
| 11. Do you think your partner has found you sexually desirable?                                 | Very often | Often    | Rarely | Never      |
| 12. Have you felt that you smelt nice?  | Never      | Rarely   | Often  | Very often |
| 13. Have you looked forward to having sexual intercourse?                                       | Not at all | A little | A lot  | Very Much  |
| 14. Have you had enough time for yourself since you had your baby?                              | Not at all | A little | A lot  | Very much  |



15. Have you found it easy to show affection to your partner?	Very often	Often	Rarely	Never
16. Have you regretted having your baby?	Never	Rarely	Often	Very often
17. Have you experienced tingling sensations in your breasts?	Very often	Often	Rarely	Never
18. Have you felt that your breasts were too small?	Not at all	A little	A lot	Very much
19. Have you liked the shape of your body?	Not at all	A little	A lot	Very much
20. Have you felt shy about sex?	Very much	A lot	A little	Not at all
21. Have you felt that your face was attractive?	Not at all	A little	A lot	Very much
22. Have you felt proud of being a mother?	Very much	A lot	A little	Not at all
23. Have you felt that sexual intercourse is less private now that you have a baby?	Very much	A lot	A little	Not at all
24. Have you been feeling happy that you have a baby?	Not at all	A little	A lot	Very much
25. Have you enjoyed kissing and petting?	Very much	A lot	A little	Not at all
26. Has your partner helped you in the running of the house?	Very much	A lot	A little	Not at all
27. Have you suffered from constipation?	Never	Rarely	Often	Very often
28. Has the thought of having several children appealed to you?	Not at all	A little	A lot	Very much
29. Have you felt disappointed by motherhood?	Very much	A lot	A little	Not at all
30. Have you been inhibited about sex since you had the baby?	Not at all	A little	A lot	Very much
31. Have you felt your breasts were too big?	Not at all	A little	A lot	Very much
32. Have you felt full of energy?	Very often	Often	Rarely	Never
33. Have your ankles swollen up?	Very often	Often	Rarely	Never
34. Have you felt your partner was paying you too little attention?	Very often	Often	Rarely	Never
35. Have you felt wide awake in the daytime?	Very often	Often	Rarely	Never
36. Has your partner seemed to ignore how you were feeling?	Very often	Often	Rarely	Never
37. Has your partner tried to share your interests?	Never	Rarely	Often	Very often
38. Have you suffered from indigestion or heartburn?	Never	Rarely	Often	Very often
39. Have you felt tense and unhappy at the thought of sexual intercourse?	Never	Rarely	Often	Very often
40. Have you enjoyed caring your baby's needs?	Not at all	A little	A lot	Very much

Maternal Adjustment Questionnaire Follow Up (English)

41. Have you felt nauseated (felt sick)?	Very often	Often	Rarely	Never
42. Have you felt that sex was unpleasant?	Very much	A lot	A little	Not at all
43. Have you felt that your partner went out too often without you?	Never	Rarely	Often	Very often
44. Have you felt proud of your appearance?	Very much	A lot	A little	Not at all
45. Have you felt you were easily aroused sexually?	Never	Rarely	Often	Very often
46. Have you been having pleasurable daydreams about sex?	Very often	Often	Rarely	Never
47. Have you felt that your body was soft and cuddly?	Very much	A lot	A little	Not at all
48. Have you been feeling close to your partner since the baby was born?	Never	Rarely	Often	Very often
49. Have you felt ungainly?	Very much	A lot	A little	Not at all
50. Have you felt like putting your arms round your partner and cuddling him?	Very much	A lot	A little	Not at all
51. Have you been wondering whether your baby will be healthy and normal?	Not at all	A little	A lot	Very much
52. Has your partner shown affection to you?	Very often	Often	Rarely	Never
53. Have you felt that your complexion was poor?	Very much	A lot	A little	Not at all
54. Has life been more difficult since the baby was born?	Not at all	A little	A lot	Very much
55. Have you felt that your breasts were attractive?	Not at all	A little	A lot	Very much
56. Have you wished you could rely more on your partner to look after you?	Very often	Often	Rarely	Never
57. Have you felt that you were too fat?	Very much	A lot	A little	Not at all
58. Have you wanted to have sexual intercourse?	Not at all	A little	A lot	Very much
59. Have you enjoyed your food?	Very much	A lot	A little	Not at all
60. Have you enjoyed feeding your baby?	Not at all	A little	A lot	Very much

## Maternal Adjustment Questionnaire (Afrikaans)

Beantwoord asseblief elke vraag deur 'n kring om die antwoord te trek wat die meeste op jou van toepassing is. Werk vinnig en onthou asseblief om elke vraag te beantwoord. Ons wil weet hoe jy die afgelope maand gevoel het. As jy nie oor party van die vrae gedurende die afgelope maand het nie, beantwoord hulle soos jy nou voel.

Hier is 'n paar voorbeelde van voltooide vrae;

Het jy flou of duiselig gevoel	Nooit	Selde	Dikwels	Baie
Het jy trots gevoel oor jou voorkoms?	Beslis	Baie	Bietjie	Glad nie

### GEDURENDE DIE AFGELOPE MAAND

1. Het jy maklik uit asem geraak?	Baie dikwels	Dikwels	Selde	Nooit
2. Het jy aantreklik gevoel?	Nooit	Selde	Dikwels	Baie dikwels
3. Was daar spanning tussen jou en jou man/vriend-irritasie, onaangename, stiltes, ens.?	Nooit	Selde	Dikwels	Baie dikwels
4. Het jy baie gesweet?	Nooit	Selde	Dikwels	Baie dikwels
5. Het jy jou man/vriend seksueel aantreklik gevind.?	Nooit	Selde	Dikwels	Baie dikwels
6. Het jy opgegooi?	Nooit	Selde	Dikwels	Baie dikwels
7. Het jy bekommerd gevoel dat jy nie 'n goeie ma sal wees nie.?	Glad nie	'n Bietjie	Baie	Beslis
8. Wanneer jy en jou vriend/man geragumenteer het, het dit al amper op 'n geslanery uitgeloop?	Baie dikwels	Dikwels	Selde	Nooit
9. Het jy flou of duiselig gevoel?	Nooit	Selde	Dikwels	Baie dikwels
10. Was jy bekommerd dat jy jou baba binne jou kan seermaak?	Glad nie	'n Bietjie	Baie	Beslis
11. Dink jy dat jou man/vriend jou seksueel aantreklik gevind het?	Baie dikwels	Dikwels	Selde	Nooit
12. Het jy gevoel dat jy lekker ruik?	Nooit	Selde	Dikwels	Baie dikwels
13. Het jy uitgesien na seks?	Glad nie	'n Bietjie	Baie	Beslis
14. Was jy bekommerd dat jy nie tyd vir jouself sal he?	Glad nie	"n Bietjie	Baie	Beslis
15. Was dit vir jou maklik om liefdevol teenoor jou man/vriend?	Baie dikwels	Dikwels	Selde	Nooit
16. Was jy spyt dat jy swanger is?	Nooit	Selde	Dikwels	Baie dikwels
17. Het jy 'n prikkelende gevoel in jou borste gehad?	Baie dikwels	Dikwels	Selde	Nooit
18. Het jy gevoel dat jou borste te klein is?	Glad nie	'n Bietjie	Baie	Beslis
19. Het jy gehou van jou lyf se vorm?	Glad nie	'n Bietjie	Baie	Beslis
20. Het jy skaam gevoel oor seks?	Beslis	Baie	'n Bietjie	Glad nie

Maternal Adjustment Questionnaire (Afrikaans)

21. Het jy gevoel dat jou gesig aantreklik/mooi is?	Glad nie	'n Bietjie	Baie	Beslis
22. Het die idee om kraamdrag te dra jou aangestaan?	Beslis	Baie	'n Bietjie	Glad nie
23. Het jy gevoel dat seks minder privaat is omdat jy 'n baba binne jou het?	Beslis	Baie	'n Bietjie	Glad nie
24. Het jy gelukkig gevoel dat jy swanger is?	Glad nie	'n Bietjie	Baie	Beslis
25. Het jy dit geniet om te soen en te vry?	Beslis	Baie	'n Bietjie	Glad nie
26. Het jou man/vriend gehelp met werk in die huis?	Beslis	Baie	'n Bietjie	Glad nie
27. Was jy hardlywig?	Nooit	Selde	Dikwels	Baie dikwels
28. Het jy ooit gedink dit sal lekker wees om baie kinders te he?	Glad nie	'n Bietjie	Baie	Beslis
29. Het jy gevoel dat swangerskap onaangenaam is?	Beslis	Baie	'n Bietjie	Glad nie
30. Het jy gewonder of dit skadelik vir die baba kan wees as jy seks het?	Glad nie	'n Bietjie	Baie	Beslis
31. Het jy gevoel dat jou borste te groot is?	Glad nie	'n Bietjie	Baie	Beslis
32. Het jy baie energiek gevoel?	Baie dikwels	Dikwels	Selde	Nooit
33. Het jou enkels opgeswel?	Baie dikwels	Dikwels	Selde	Nooit
34. Het jy gevoel dat jou man/vriend te min aandag aan jou gee?	Baie dikwels	Dikwels	Selde	Nooit
35. Het jy gedeurende die dag wawyd wakker gevoel?	Baie dikwels	Dikwels	Selde	Nooit
36. Het dit gelyk of jou man/vriend jou gevoelens ignoreer?	Baie dikwels	Dikwels	Selde	Nooit
37. Het jou man/vriend probeer om jou belangstellings te deel?	Nooit	Selde	Dikwels	Baie dikwels
38. Het jy gely aan slegte spysvertering of sooibrand?	Nooit	Selde	Dikwels	Baie dikwels
39. Het jy gespanne en ongelukkig gevoel wanneer jy dink aan seks he?	Nooit	Selde	Dikwels	Baie dikwels
40. Het jy daarna uitgesien om jou baba te versorg?	Glad nie	'n Bietjie	Baie	Beslis
41. Het jy naar gevoel?	Baie dikwels	Dikwels	Selde	Nooit
42. Het jy gevoel dat seks onaangenaam is?	Beslis	Baie	'n Bietjie	Glad nie
43. Het jy gevoel dat jou man/vriend te veel sonder jou uitgaan?	Nooit	Selde	Dikwels	Baie dikwels
44. Het jy trots gevoel oor jou voorkoms?	Beslis	Baie	'n Bietjie	Glad nie
45. Was dit vir jou maklik om lus te word vir seks?	Nooit	Selde	Dikwels	Baie dikwels
46. Het jy aangenaam dagdrome oor seks gehad?	Baie dikwels	Dikwels	Selde	Nooit

Maternal Adjustment Questionnaire (Afrikaans)

47. Het jy gevoel dat jou liggaam sag en troetelbaar is?	Beslis	Baie	'n Bietjie	Glad nie
48. Het jy na aan jou vriend/man gevoel vandat jy swanger geword het?	Nooit	Selde	Dikwels	Baie dikwels
49. Het jy lomp gevoel?	Beslis	Baie	'n Bietjie	Glad nie
50. Het jy lus gevoel om jou arms om jou vriend/man te sit en hom te liefkoos?	Beslis	Baie	'n Bietjie	Glad nie
51. Het jy gewonder of jou baba gesond en normaal sal wees?	Glad nie	'n Bietjie	Baie	Beslis
52. Het jou vriend/man liefde teenoor jou gewys?	Baie dikwels	Dikwels	Selde	Nooit
53. Het jy gevoel dat jou vel nie mooi is nie?	Beslis	Baie	'n Bietjie	Glad nie
54. Het jy gevoel dat die lewe moeiliker sal wees nadat jou baba gebore is?	Glad nie	'n Bietjie	Baie	Beslis
55. Het jy gevoel dat jou borste onaantreklik is?	Glad nie	'n Bietjie	Baie	Beslis
56. Het jy gewens dat jy meer op jou man/vriend kan staatmaak om vir jou te sorg?	Baie dikwels	Dikwels	Selde	Nooit
57. Het jy gevoel dat jy veels te vet is?	Beslis	Baie	'n Bietjie	Glad nie
58. Wou jy seks he?	Glad nie	'n Bietjie	Baie	Beslis
59. Het jy jou kos geniet?	Beslis	Baie	'n Bietjie	Glad nie
60. Hou jy van die idee dat jy jou baba sal borsvoed?	Glad nie	'n Bietjie	Baie	Beslis



Naam.....

Vandag se' datum..... Geboorte datum van jou baba.....

Hoeveel weeke na die geboorte?.....

Beantwoord asseblief elke vraag deur 'n kring om die antwoord te trek wat die meeste op jou van toepassing is. Werk vinnig en onthou asseblief om elke vraag te beantwoord. Ons wil weet hoe jy die afgelope twee weeke gevoel het. As jy nie oor party van die vrae gedurende die afgelope twee weeke het nie, beantwoord hulle soos jy nou voel.

Hier is 'n paar voorbeelde van voltooide vrae;

Het jy flou of duiselig gevoel                      Nooit                      Selde                      Dikwels                      Baie

Het jy trots gevoel oor jou  
voorkoms?                      Beslis                      Baie                      Bietjie                      Glad nie

**GEDURENDE DIE AFGELOPE TWEE WEEKE**

1. Het jy maklik uit asem geraak?	Baie dikwels	Dikwels	Selde	Nooit
2. Het jy aantreklik gevoel?	Nooit	Selde	Dikwels	Baie dikwels
3. Was daar spanning tussen jou en jou man/vriend-irritasie, onaangename, stiltes, ens.?	Nooit	Selde	Dikwels	Baie dikwels
4. Het jy baie gesweet?	Nooit	Selde	Dikwels	Baie dikwels
5. Het jy jou man/vriend seksueel aantreklik gevind.?	Nooit	Selde	Dikwels	Baie dikwels
6. Het jy opgegooi?	Nooit	Selde	Dikwels	Baie dikwels
7. Het jy bekommerd gevoel dat jy nie 'n goeie ma sal wees nie.?	Glad nie	'n Bietjie	Baie	Beslis
8. Wanneer jy en jou vriend/man geragumenteer het, het dit al amper op 'n geslanery uitgeloop?	Baie dikwels	Dikwels	Selde	Nooit
9. Het jy flou of duiselig gevoel?	Nooit	Selde	Dikwels	Baie dikwels
10. Was jy bekommerd dat jy jou baba kan seermaak?	Glad nie	'n Bietjie	Baie	Beslis
11. Dink jy dat jou man/vriend jou seksueel aantreklik gevind het?	Baie dikwels	Dikwels	Selde	Nooit
12. Het jy gevoel dat jy lekker ruik?	Nooit	Selde	Dikwels	Baie dikwels
13. Het jy uitgesien na seks?	Glad nie	'n Bietjie	Baie	Beslis
14. Het jy genoeg tyd vir jouself gehad sedert jou baba se geboorte?	Glad nie	"n Bietjie	Baie	Beslis
15. Was dit vir jou maklik om liefdevol teenoor jou man/vriend?	Baie dikwels	Dikwels	Selde	Nooit

16. Was jy spyt dat jy die baba gehad het?	Nooit	Selde	Dikwels	Baie dikwels
17. Het jy 'n prikkelende gevoel in jou borste gehad?	Baie dikwels	Dikwels	Selde	Nooit
18. Het jy gevoel dat jou borste te klein is?	Glad nie	'n Bietjie	Baie	Beslis
19. Het jy gehou van jou lyf se vorm?	Glad nie	'n Bietjie	Baie	Beslis
20. Het jy skaam gevoel oor seks?	Beslis	Baie	'n Bietjie	Glad nie
21. Het jy gevoel dat jou gesig aantreklik/mooi is?	Glad nie	'n Bietjie	Baie	Beslis
22. Het jy trots gevoel om 'n ma te wees?	Beslis	Baie	'n Bietjie	Glad nie
23. Het jy gevoel dat seks minder privaat is noudat jy die baba het?	Beslis	Baie	'n Bietjie	Glad nie
24. Was jy blay dat jy 'n baba het?	Glad nie	'n Bietjie	Baie	Beslis
25. Het jy dit geniet om te soen en te vry?	Beslis	Baie	'n Bietjie	Glad nie
26. Het jou man/vriend gehelp met werk in die huis?	Beslis	Baie	'n Bietjie	Glad nie
27. Was jy hardlywig?	Nooit	Selde	Dikwels	Baie dikwels
28. Het jy ooit gedink dit sal lekker wees om baie kinders te he?	Glad nie	'n Bietjie	Baie	Beslis
29. Het jy teleurgesteld gevoel oor moederskap?	Beslis	Baie	'n Bietjie	Glad nie30.
30. Het jy, sedert jou baba se geboorte, skaam gevoel oor seks?	Glad nie	'n Bietjie	Baie	Beslis
31. Het jy gevoel dat jou borste te groot is?	Glad nie	'n Bietjie	Baie	Beslis
32. Het jy baie energiek gevoel?	Baie dikwels	Dikwels	Selde	Nooit
33. Het jou enkels opgeswel?	Baie dikwels	Dikwels	Selde	Nooit
34. Het jy gevoel dat jou man/vriend te min aandag aan jou gee?	Baie dikwels	Dikwels	Selde	Nooit
35. Het jy gedeurende die dag wawyd wakker gevoel?	Baie dikwels	Dikwels	Selde	Nooit
36. Het dit gelyk of jou man/vriend jou gevoelens ignoreer?	Baie dikwels	Dikwels	Selde	Nooit
37. Het jou man/vriend probeer om jou belangstellings te deel?	Nooit	Selde	Dikwels	Baie dikwels
38. Het jy gely aan slegte spysvertering of sooibrand?	Nooit	Selde	Dikwels	Baie dikwels
39. Het jy gespanne en ongelukkig gevoel wanneer jy dink aan seks he?	Nooit	Selde	Dikwels	Baie dikwels
40. Het jy dit geniet om na jou baba te versorg?	Glad nie	'n Bietjie	Baie	Beslis
41. Het jy naar gevoel?	Baie dikwels	Dikwels	Selde	Nooit
42. Het jy gevoel dat seks onaangenaam is?	Beslis	Baie	'n Bietjie	Glad nie

43. Het jy gevoel dat jou man/vriend te veel sonder jou uitgaan?	Nooit	Selde	Dikwels	Baie dikwels
44. Het jy trots gevoel oor jou voorkoms?	Beslis	Baie	'n Bietjie	Glad nie
45. Was dit vir jou maklik om lus te word vir seks?	Nooit	Selde	Dikwels	Baie dikwels
46. Het jy aangenaam dagdrome oor seks gehad?	Baie dikwels	Dikwels	Selde	Nooit
47. Het jy gevoel dat jou liggaam sag en troetelbaar is?	Beslis	Baie	'n Bietjie	Glad nie
48. Het jy naby aan jou vriend/man gevoel vandat jou baba gebore is?	Nooit	Selde	Dikwels	Baie dikwels
49. Het jy lomp gevoel?	Beslis	Baie	'n Bietjie	Glad nie
50. Het jy lus gevoel om jou arms om jou vriend/man te sit en hom te liefkoos?	Beslis	Baie	'n Bietjie	Glad nie
51. Het jy gewonder of jou baba gesond en normaal sal wees?	Glad nie	'n Bietjie	Baie	Beslis
52. Het jou vriend/man liefde teenoor jou gewys?	Baie dikwels	Dikwels	Selde	Nooit
53. Het jy gevoel dat jou vel nie mooi is nie?	Beslis	Baie	'n Bietjie	Glad nie
54. Was die lewe vir jpu moeiliker vadat jou baba gebore is?	Glad nie	'n Bietjie	Baie	Beslis
55. Het jy gevoel dat jou borste onaantreklik is?	Glad nie	'n Bietjie	Baie	Beslis
56. Het jy gewens dat jy meer op jou man/vriend kan staatmaak om vir jou te sorg?	Baie dikwels	Dikwels	Selde	Nooit
57. Het jy gevoel dat jy veels te vet is?	Beslis	Baie	'n Bietjie	Glad nie
58. Wou jy seks he?	Glad nie	'n Bietjie	Baie	Beslis
59. Het jy jou kos geniet?	Beslis	Baie	'n Bietjie	Glad nie
60. Het jy dit geniet om jou baba te voed?	Glad nie	'n Bietjie	Baie	Beslis





**APPENDIX D**

**EYSENCK PERSONALITY QUESTIONNAIRE (EPQ)**



UNIVERSITY *of the*  
WESTERN CAPE

# EPQ

(Adult)

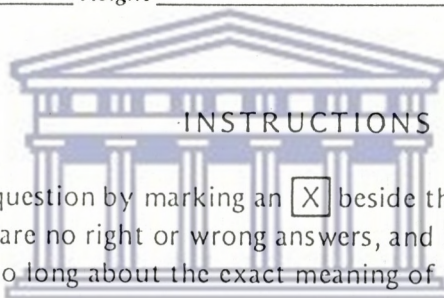
Name \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Occupation \_\_\_\_\_ Date \_\_\_\_\_

Firm \_\_\_\_\_ Marital Status \_\_\_\_\_

Health Status \_\_\_\_\_

Weight \_\_\_\_\_ Height \_\_\_\_\_ Code \_\_\_\_\_



## INSTRUCTIONS

Please answer each question by marking an  beside the "YES" or the "NO" following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question.

PLEASE REMEMBER TO ANSWER EACH QUESTION

UNIVERSITY OF  
WESTERN CAPE



PUBLISHED BY EdITS/EDUCATIONAL AND INDUSTRIAL TESTING SERVICE  
BOX 7234, SAN DIEGO, CALIFORNIA 92107

IN EVERY QUESTION, MARK JUST ONE BOX.

1. Do you have many different hobbies? . . . . . YES  NO
2. Do you stop to think things over before doing anything? . . . . . YES  NO
3. Does your mood often go up and down? . . . . . YES  NO
4. Have you ever taken the praise for something you knew someone else had really done? . . . . . YES  NO
5. Are you a talkative person? . . . . . YES  NO
6. Would being in debt worry you? . . . . . YES  NO
7. Do you ever feel "just miserable" for no reason? . . . . . YES  NO
8. Were you ever greedy by helping yourself to more than your share of anything? . . . . . YES  NO
9. Do you lock up your house carefully at night? . . . . . YES  NO
10. Are you rather lively? . . . . . YES  NO
11. Would it upset you a lot to see a child or an animal suffer? . . . . . YES  NO
12. Do you often worry about things you should not have done or said? . . . . . YES  NO
13. If you say you will do something, do you always keep your promise no matter how inconvenient it might be? . . . . . YES  NO
14. Can you usually let yourself go and enjoy yourself at a lively party? . . . . . YES  NO
15. Are you an irritable person? . . . . . YES  NO
16. Have you ever blamed someone for doing something you knew was really your fault? . . . . . YES  NO
17. Do you enjoy meeting new people? . . . . . YES  NO
18. Do you believe insurance plans are a good idea? . . . . . YES  NO
19. Are your feelings easily hurt? . . . . . YES  NO
20. Are *all* your habits good and desirable ones? . . . . . YES  NO
21. Do you tend to keep in the background on social occasions? . . . . . YES  NO
22. Would you take drugs which may have strange or dangerous effects? . . . . . YES  NO
23. Do you often feel "fed-up"? . . . . . YES  NO
24. Have you ever taken anything (even a pin or button) that belonged to someone else? . . . . . YES  NO
25. Do you like going out a lot? . . . . . YES  NO
26. Do you enjoy hurting people you love? . . . . . YES  NO
27. Are you often troubled about feelings of guilt? . . . . . YES  NO
28. Do you sometimes talk about things you know nothing about? . . . . . YES  NO
29. Do you prefer reading to meeting people? . . . . . YES  NO
30. Do you have enemies who want to harm you? . . . . . YES  NO
31. Would you call yourself a nervous person? . . . . . YES  NO
32. Do you have many friends? . . . . . YES  NO
33. Do you enjoy practical jokes that can sometimes really hurt people? . . . . . YES  NO
34. Are you a worrier? . . . . . YES  NO
35. As a child did you do as you were told immediately and without grumbling? . . . . . YES  NO
36. Would you call yourself happy-go-lucky? . . . . . YES  NO
37. Do good manners and cleanliness matter much to you? . . . . . YES  NO
38. Do you worry about awful things that might happen? . . . . . YES  NO
39. Have you ever broken or lost something belonging to someone else? . . . . . YES  NO
40. Do you usually take the initiative in making new friends? . . . . . YES  NO
41. Would you call yourself tense or "highly-strung"? . . . . . YES  NO
42. Are you mostly quiet when you are with other people? . . . . . YES  NO
43. Do you think marriage is old-fashioned and should be done away with? . . . . . YES  NO
44. Do you sometimes boast a little? . . . . . YES  NO
45. Can you easily get some life into a rather dull party? . . . . . YES  NO

GO RIGHT ON TO THE NEXT PAGE.

46. Do people who drive carefully annoy you? . . . . . YES  NO
47. Do you worry about your health? . . . . . YES  NO
48. Have you ever said anything bad or nasty about anyone? . . . . . YES  NO
49. Do you like telling jokes and funny stories to your friends? . . . . . YES  NO
50. Do most things taste the same to you? . . . . . YES  NO
51. As a child did you ever talk back to your parents? . . . . . YES  NO
52. Do you like mixing with people? . . . . . YES  NO
53. Does it worry you if you know there are mistakes in your work? . . . . . YES  NO
54. Do you suffer from sleeplessness? . . . . . YES  NO
55. Do you always wash before a meal? . . . . . YES  NO
56. Do you nearly always have a "ready answer" when people talk to you? . . . . . YES  NO
57. Do you like to arrive at appointments in plenty of time? . . . . . YES  NO
58. Have you often felt listless and tired for no reason? . . . . . YES  NO
59. Have you ever cheated at a game? . . . . . YES  NO
60. Do you like doing things in which you have to act quickly? . . . . . YES  NO
61. Is (or was) your mother a good woman? . . . . . YES  NO
62. Do you often feel life is very dull? . . . . . YES  NO
63. Have you ever taken advantage of someone? . . . . . YES  NO
64. Do you often take on more activities than you have time for? . . . . . YES  NO
65. Are there several people who keep trying to avoid you? . . . . . YES  NO
66. Do you worry a lot about your looks? . . . . . YES  NO
67. Do you think people spend too much time safeguarding their future with savings and insurances? . . . . . YES  NO
68. Have you ever wished that you were dead? . . . . . YES  NO
69. Would you dodge paying taxes if you were sure you could never be found out? . . . . . YES  NO
70. Can you get a party going? . . . . . YES  NO
71. Do you try not to be rude to people? . . . . . YES  NO
72. Do you worry too long after an embarrassing experience? . . . . . YES  NO
73. Have you ever insisted on having your own way? . . . . . YES  NO
74. When you catch a train do you often arrive at the last minute? . . . . . YES  NO
75. Do you suffer from "nerves"? . . . . . YES  NO
76. Do your friendships break up easily without it being your fault? . . . . . YES  NO
77. Do you often feel lonely? . . . . . YES  NO
78. Do you always practice what you preach? . . . . . YES  NO
79. Do you sometimes like teasing animals? . . . . . YES  NO
80. Are you easily hurt when people find fault with you or the work you do? . . . . . YES  NO
81. Have you ever been late for an appointment or work? . . . . . YES  NO
82. Do you like plenty of bustle and excitement around you? . . . . . YES  NO
83. Would you like other people to be afraid of you? . . . . . YES  NO
84. Are you sometimes bubbling over with energy and sometimes very sluggish? . . . . . YES  NO
85. Do you sometimes put off until tomorrow what you ought to do today? . . . . . YES  NO
86. Do other people think of you as being very lively? . . . . . YES  NO
87. Do people tell you a lot of lies? . . . . . YES  NO
88. Are you touchy about some things? . . . . . YES  NO
89. Are you always willing to admit it when you have made a mistake? . . . . . YES  NO
90. Would you feel very sorry for an animal caught in a trap? . . . . . YES  NO

PLEASE CHECK TO SEE THAT YOU HAVE ANSWERED ALL THE QUESTIONS

## INSTRUKSIES

Antwoord asseblief elke vraag deur 'n kruisie te plaas in die blokkie vir "JA" of "NEE" by elke vraag. Daar is geen regte of verkeerde antwoorde of strik vroeë nie. **Werk vinnig en moet nie te lank dink oor die presiese betekenis van elke vraag nie.**

Onthou asseblief om elke vraag te beantwoord

- |  |    |     |
|--|----|-----|
| 1. Het u verskeie stokperdjies?.....   | Ja | Nee |
| 2. Dink u iets andagtig deur voordat u dit uitvoer?.....                                       | Ja | Nee |
| 3. Het jy dikwels veranderinge in jou bui?.....  | Ja | Nee |
| 4. Het u al ooit die lof aanvaar vir iets wat iemand anders<br>gedoen het?.....                | Ja | Nee |
| 5. Beskou u uself as spraaksam?.....   | Ja | Nee |
| 6. Sal finansiële skuld u bekommer?.....   | Ja | Nee |
| 7. Voel u ooit ellendig vir geen spesifieke rede nie?.....                                     | Ja | Nee |
| 8. Het u al ooit meer van iets gevat as wat u geregtelik toekom? ...                           | Ja | Nee |
| 9. Sluit u u huis noukeurig elke nag?.....   | Ja | Nee |
| 10. Beskou u uself as opgeruimt? .....   | Ja | Nee |
| 11. Sal dit u werklik omkrap om te sien hoe 'n kind of dier ly?.....                           | Ja | Nee |
| 12. Bekommer u uself dikwels oor dinge wat u nie moes<br>gedoen of gese het nie?.....          | Ja | Nee |
| 13. Voer u altyd u beloftes uit, ongeag hoe ongerieflik dit vir u<br>mag wees.....             | Ja | Nee |
| 14. Kan jy maklik ontspan en jouself geniet by 'n lewendige<br>partytjie?.....                 | Ja | Nee |
| 15. Het u 'n prikkelbare persoonlikheid?.....  | Ja | Nee |
| 16. Het u al ooit iemand anders blameer vir iets wat u eintlik<br>self gedoen het?.....        | Ja | Nee |
| 17. Geniet u dit om nuwe mense te ontmoet?.....  | Ja | Nee |
| 18. Glo u dat versekerings skema's 'n goeie idee is?.....                                      | Ja | Nee |
| 19. Word u gevoelens maklik seer gemaak?.....  | Ja | Nee |
| 20. Is al u gewoontes goed en wenslik?.....  | Ja | Nee |
| 21. Sal u gewoonlik op die agtergrond bly by 'n sosiale<br>byeenkoms?.....                     | Ja | Nee |
| 22. Sal u enige verdowingsmiddels gebruik wat vreemde<br>of gevaarlike uitwerking mag he?..... | Ja | Nee |
| 23. Voel u dikwels moedeloos?.....   | Ja | Nee |
| 24. Het u al ooit iets, selfs 'n speld of knoop, gevat wat nie aan<br>u behoort het nie?.....  | Ja | Nee |
| 25. Geniet u dit om dikwels uit te gaan?.....  | Ja | Nee |
| 26. Hou u daarvan om geliefdes seer te maak?.....  | Ja | Nee |
| 27. Pla skuldgevoelens u dikwels? .....  | Ja | Nee |
| 28. Praat u somtyds oor dinge waarvan u eintlik niks weet nie?.....                            | Ja | Nee |

29. Sal u verkies om 'n boek te lees bo om ander mense te ontmoet?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
30. Het u vyande wat u wil benadeel?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
31. Beskou u uself as 'n senuweeagtige persoon?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
32. Het u baie vriende?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
33. Geniet u poetse wat mense soms seer kan maak?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
34. Is u 'n persoon wat baie oor dinge bekommer?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
35. As kind, het u altyd dadelik gedoen wat vir u gese was?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
36. Dink u, u is sorgeloos?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
37. Is goeie maniere en sindelikheid vir u belangrik?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
38. Is u bekommerd oor aaklige dinge wat dalk kan gebeur?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
39. Het u al ooit iets verloor of gebreek wat aan iemand anders behoort het?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
40. Sal u gewoonlik die initiatief neem om nuwe vriende te maak?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
41. Beskou u uself as gespanne?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
42. Is u gewoonlik stil tussen ander mense?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
43. Dink u dat die huwelik outyds is en afgeskaf behoort te word?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
44. Spog u somtyds 'n bietjie?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
45. Vind u dit maklik om 'n bietjie lewe in 'n vervelige partytjie in te bring?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
46. Pla mense wat versigtig bestuur u?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
47. Is u bekommerd oor u gesondheid?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
48. Het u al ooit iets slegs of gemeen oor iemand gese?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
49. Geniet u dit om grappe of snaakse gebeure met u vriende te deel?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
50. Smaak die meeste dinge vir u dieselfde?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
51. Het u ooit as kind teen u ouers teruggepraat?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
52. Geniet u dit om met mense te meng?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
53. Pla dit u as u weet dat daar fout is met u werk?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
54. Ly u aan slapeloosheid?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
55. Was u altyd voor 'n maaltyd?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
56. As mense met u praat, het u altyd 'n antwoord reg?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
57. Hou u daarvan om vroegtydig by afspraak te arriveer?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
58. Het u al dikwels moeg of lusteloos gevoel?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
59. Het u al ooit met 'n speletjie verneuk?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
60. Geniet u aktiwiteite waarin u vinnig moet reageer?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
61. Is (of was) u moeder 'n goeie vrou?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
62. Voel u dikwels dat die lewe vervelig is?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
63. Het u al ooit van iemand misbruik gemaak?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
64. Neem u dikwels deel aan meer aktiwiteite as waarvoor u tyd het?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
65. Is daar heelwat mense wat heelyd uit u pad probeer bly?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
66. Is u besorg oor u voorkoms?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
67. Dink u dat mense te veel tyd spandeer om 'n beter toekoms te voorsien eur versekering of te spaar?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_

68. Het u al ooit gewens u was dood?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
69. Sal u vermy om belasting te betaal as u weet dat u nie uitgang sal word nie?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
70. Kan u 'n partytjie lewe gee?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
71. Probeer u u bes om nie onbeleef teenoor ander te wees nie?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
72. Is u te lank bekommerd nadat u in die verleendheid beland het?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
73. Het u al ooit daarop aangedring dat iets op u manier gedoen moes word?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
74. As u per trein moet reis, arriveer u dikwels op die laaste minuut?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
75. Voel u dikwels alleen?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
76. Verbreek u vriendskappe dikwels sonder dat dit u skuld is?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
77. Is u senuweeagtig?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
78. Volg u altyd u eie raad?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
79. Hou u daarvan om diere soms te terg?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
80. Voel u maklik seergemaak as mense fout vind met u of die werk wat u doen?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
81. Was u al ooit laat vir 'n afspraak of vir die werk?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
82. Hou u van baie opwinding?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
83. Sal u daarvan hou as mense vir u bang is?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
84. Is u somtyds baie energiek en somtyds weer baie lui?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
85. Stel u dinge somtyds uit tot more as u dit eintlik vandag moes doen?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
86. Is ander mense onder die indruk dat u 'n baie lewendige mens is?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
87. Vertel mense dikwels vir u leuens?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
88. Is u baie sensitief oor sekere dinge?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
89. Is u altyd bereid om u foute te erken?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_
90. Sal u jammer voel vir 'n dier wat in 'n lokval vasgevang is?..... Ja \_\_\_\_\_ Nee \_\_\_\_\_

1	2	3	4

**APPENDIX E**

**LIFE EVENTS QUESTIONNAIRE (LTEQ)**



UNIVERSITY *of the*  
WESTERN CAPE



Life Events Questionnaire (English)

LIFE EVENTS QUESTIONNAIRE

**INSTRUCTIONS:** Have any of the following events or problems happened to you during the last 6 months? Please tick the box corresponding to the month in which any event happened or began.

	July	August	September	October	November	December	January
You yourself suffered a serious illness, injury or an assault							
A serious illness, injury or assault happened to a close relative.							
Your parent, child or spouse died.							
A close family friend or another relative (aunt, cousin, grandparent) died.							
You had a separation due to marital difficulties.							
You broke off a steady relationship.							
You had a serious problem with a close friend, neighbour or relative.							
You became unemployed or you were seeking work unsuccessfully for more than one month.							
You were sacked from your job.							
You had a major financial crisis							
You had problems with the police and a court appearance.							
Something you valued was lost or stolen.							

Life Events Questionnaire (Afrikaans)

LEWE GEBEURTENISSE VRAESTEL

**INSTRUKSIES:** Het u enige van die volgende gebeurtenisse of probleme in die laaste ses maande ervaar? Teken asseblief in die blokkie wat korrespondeer met die maand waarin die gebeurtenis plaasgevind of wanneer dit begin het.

	Julie	Augustus	September	Oktober	November	Desember	Januarie
Het u self 'n ernigste siekte of besering gehad of was u aangerand							
'n Hegte gesinslid het 'n ernstige siekte of besering gehad of was aangerand							
U ouer, kind of eggenote is oorlede.							
'n Hegte gesinsvriend, 'n ander gesinslid (tante, neef, ouma/oupa) is oorlede.							
U is weg van eggenote weens huweliks probleme.							
U het 'n vaste verhouding afgebreek.							
U het 'n groote probleem met 'n hegte vriend, buurman of gesinslid gehad.							
U het werk verloor of u het gesoek vir werk vir meer as 'n maand sonder om dit te kry.							
U is gevra om u werk te verlaat.							
U het 'n groot finansiele krisis gehad.							
U het probleme met die polisie gehad en u moes in die hof verskyn.							
U het iets wat baie waardevol vir u verloor, of dit was gesteel.							

**APPENDIX F**

**SOCIAL SUPPORT QUESTIONNAIRE (SSQ)**



UNIVERSITY *of the*  
WESTERN CAPE

The following questions are about people in your environment from whom you receive help or support. Each question consists of two parts. In the first part(s), please list everybody (except yourself) whom you can depend on for the type of help or support described. You may list either the person's initials or his/her relationship to you, e.g. neighbour, husband, friend, etc. Do not list more than one person per letter next to each question, and do not list more than nine persons per question.

In the second part (b), please circle the number which indicates your measure of satisfaction with the support you receive.

The numbers 1 to 6 indicate your measure of satisfaction as follows:

- 6 Very satisfied
- 5 Fairly satisfied
- 4 Slightly satisfied
- 3 Slightly dissatisfied
- 2 Fairly dissatisfied
- 1 Very dissatisfied

If you get no support for a question, put a check before the word "None", but indicate your measure of satisfaction with this as well.

Please answer all the questions as well as you can.

1(a) Whom can you really count on to listen when you need to talk?

None

A

D

G

B

E

H

C

F

I

(b) 6                      5                      4                      3                      2                      1

2(a) Whom could you really count on to help you out in a crisis situation, even though they would have to go out of their way to do so?

None

A

D

G

B

E

H

C

F

I

(b) 6                      5                      4                      3                      2                      1

3(a) Whom can you really count on to be dependable when you need help?

None

A

D

G

B

E

H

C

F

I

(b) 6                      5                      4                      3                      2                      1

4(a) With whom can you be totally yourself?

___None	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

5(a) Who do you feel really appreciates you as a person?

___None	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

6(a) Whom can you count on to console you when you are very upset?

___None	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

7(a) Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

___None	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

8(a) Whose lives do you feel you are an important part of?

___None	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

9(a) Whom can you really count on to distract you from your worries when you feel under stress?

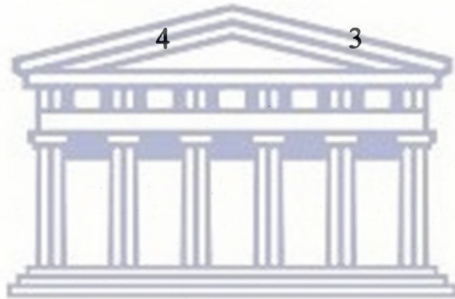
___ None	A	D	G
	B	E	H
	C	F	I

(b) 6            5            4            3            2            1

10(a) Who helps you feel that you truly have something positive to contribute to others?

___ None	A	D	G
	B	E	H
	C	F	I

(b) 6            5            4            3            2            1



UNIVERSITY *of the*  
WESTERN CAPE

Die volgende vrae handel oor mense in u omgewing van wie u hulp of ondersteuning kry. Elke vraag bestaan uit twee dele. In die eerste deel (a) noem u almal wat u ken, behalwe uself, op wie u kan staatmaak vir die soort hulp of ondersteuning wat beskryf word. U kan of die persoon se voorletters of sy/haar verhouding tot u aandui, by. buurvrou, man, vriendin, ens. Moenie meer as een persoon by elke letter langs die vraag noem nie.

In die tweede deel van die vraag (b) trek u 'n kringetjie om die syfer wat aandui hoe bevredigend die mate van ondersteuning wat u kry, vir u is.

Die syfers 1 tot 6 dui u mate van bevrediging soos volg aan:

- 6 Baie bevrediging
- 5 Taamlik bevrediging
- 4 Net effens bevrediging
- 3 Effens onbevrediging
- 2 Taamlik onbevrediging
- 1 Baie onbevrediging

As u geen ondersteuning kry op 'n vraag nie, maak 'n regmerkie voor die woord "Niemand", maar dui ook hier u mate van bevrediging aan. Moenie meer as nege mense per vraag noem nie.

Beantwoord asseblief al die vrae so goed as u kan.

1(a) Op wie kan u regtig staatmaak om te luister as u 'n behoefte het om met iemand te praat?

_____ Niemand	A	D	G
	B	E	H
	C	F	I

(b) 6                      5                      4                      3                      2                      1

2(a) Op wie kan u regtig staatmaak om by u te staan in 'n krisissituasie, selfs al moet hulle hul pad gaan om dit te doen?

_____ Niemand	A	D	G
	B	E	H
	C	F	I

(b) 6                      5                      4                      3                      2                      1

3(a) Op wie kan u regtig staatmaak om biskikbaar te wees as u hulp nodig het?

___Niemand	A	D	G
	B	E	H
	C	F	I
(b) 6	5	4	3
			2
			1

4(a) By wie kan u heeltemaal uself wees?

___Niemand	A	D	G
	B	E	H
	C	F	I
(b) 6	5	4	3
			2
			1

5(a) Wie, voel u, het werklik waardering vir u as mens?

___Niemand	A	D	G
	B	E	H
	C	F	I
(b) 6	5	4	3
			2
			1

6(a) Op wie kan u staatmaak om te vertrous as u werklik onsteld is?

___Niemand	A	D	G
	B	E	H
	C	F	I
(b) 6	5	4	3
			2
			1

7(a) Op wie kan u staatmaak om u te hulp ontspan as u onder druk verkeer of gespanne voel?

___Niemand	A	D	G
	B	E	H
	C	F	I
(b) 6	5	4	3
			2
			1



8(a) Van wie se lewens, voel u, maak u 'n belangrike deel uit?

___Niemand	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

9(a) Op wie kan u werklik staatmaak om u aandag van u probleme af te lei as u gespanne voel?

___Niemand	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

10(a) Wie laat u voel dat u werklik 'n positiewe bydrae het om aan ander te lewer?

___Niemand	A	D	G
	B	E	H
	C	F	I

(b) 6 5 4 3 2 1

