

**Comparison of the effectiveness of group interventions on Indian women diagnosed with mild to moderate depression at an urban psychiatric clinic in KwaZulu–Natal**

By

Dayanithe Chetty

**Dissertation submitted in full compliance with the requirements for the Master Degree of Technology: Nursing Department of Postgraduate Nursing Studies, Durban Institute of Technology**

I, D. Chetty, do hereby declare that this is representative of my own work.

Signature of student

Date of Signature

Name of Supervisor:

Dr. Heidi Brooks

Signature of Supervisor

Date of Signature

Signature of Joint

Supervisor

Date of Signature

Professor Linda Grainger

Co – Examiner:

Mrs. Maureen Harris

External Examiner:

Professor V. Ehlers

**COMPARISON OF THE EFFECTIVENESS OF GROUP INTERVENTIONS ON  
INDIAN WOMEN DIAGNOSED WITH MILD TO MODERATE DEPRESSION AT  
AN URBAN PSYCHIATRIC CLINIC IN KWAZULU-NATAL**

By

DAYANITHEE CHETTY

**Dissertation submitted in full compliance with the requirements for the Masters Degree  
of Technology: Nursing Department of Postgraduate Nursing Studies, Durban Institute  
of Technology**

## **DEDICATION**

Dedicated to my loving parents and youngest sister who left tragically during the course of my studies.

## **ACKNOWLEDGEMENTS**

My sincere thanks and appreciation go out to the following persons without whom this research study would not have been possible.

- The Department of Community Psychiatric Services, Department of Health for their permission to conduct the study at the clinic
- The depressed women who trusted me and shared their experiences so freely and willingly and also gave of their time to study
- Professor Verona Gordon, USA. Thank you for your wisdom, information, inspiration and empowerment to women world – wide and to nurse researchers
- Mrs. Nalini Padaychee and the staff of Chatsworth Community Psychiatric Clinic
- Shoba and the staff of the Occupational Therapy Department, Chatsworth Clinic
- Professor Linda Grainger for her kindness, patience and perseverance in directing me to the end of my research
- Doctor Heidi Brooks who encouraged me, when I was at my lowest
- The staff of the Department of Post – Graduate Nursing Studies, Durban Institute of Technology, for the tea and reassurance
- The visiting staff from Northern Michigan University – thank you for literature mailed to me
- My family and friends for their moral support
- My daughter, Shivani who made great sacrifices and waited long hours alone for me
- My friend Malani Govender, Librarian at the University of Natal, who assisted me so generously and readily with both material and emotional support throughout my studies
- Patience and Saru, librarians at RKKhan Hospital

- The late Marianne Pienaar, Durban Institute of Technology Library
- Mrs. Punjie Naidoo, Mrs. Jaya Reddy, Mrs. Joyce Marks and Miss Radha Naicker for their concern and assistance
- Lundbeck Pharmaceutical Company for their financial assistance, this was tremendous help
- Sue Vermaak, from The Anxiety and Depression group, (Bluff region) for your kindness and assistance
- The staff of the Medical Research Unit on Anxiety and Stress Disorders, University of Stellenbosch, Cape Town, thank you for information shared; and
- Last but not least, I could not have done it without God's help. Thank you, it was a very big struggle.

## **GLOSSARY OF ABBREVIATIONS**

NFCG

Nurse – facilitated cognitive group

VLCG

Volunteer – led crafts group

CG

Control group

EG1

Experimental group 1

EG2

Experimental group 2

PPQ

Personal Profile Questionnaire

BDI

Beck Depression Inventory

LES

Life – Experience Survey

RSE

Rosenberg Self – Esteem Scale

## **APPENDICES**

APPENDIX 1	Letter to Professor Verona Gordon
APPENDIX 2	Letter from Professor Verona Gordon
APPENDIX 3	Informed Consent Form
APPENDIX 4	Information letter for the Nurse – facilitated cognitive group
APPENDIX 5	Information letter for the Volunteer – led crafts group
APPENDIX 6	Information letter for the Control group
APPENDIX 7	Personal Profile Questionnaire
APPENDIX 8	Beck Depression Inventory
APPENDIX 9	Rosenberg Self – Esteem Scale
APPENDIX 10	Exercise Levels Questionnaire
APPENDIX 11	Holmes and Rae Questionnaire
APPENDIX 12	Life Experience Survey
APPENDIX 13	Minor and Major Depression Episode (DSM1V)
APPENDIX 14	Theme message: Change is Constant
APPENDIX 15	20 Group sessions from Verona Gordon's Women's Workbook and Facilitator's Manual
APPENDIX 16	Guidelines for Facilitators who wish to replicate research using Gordon's format

## **ABSTRACT**

The aim of this quasi-experimental study was to compare the effectiveness of a Nurse-facilitated cognitive group intervention, a Volunteer-led support group intervention and a standard treatment Control group on mild to moderately depressed Indian women at an urban community psychiatric clinic in KwaZulu-Natal in terms of their levels of depression and self-esteem over a three-month period.

Since antidepressants alone are ineffective in the treatment of depression, the study evaluated group interventions as adjunctive treatments. The first intervention involved 15 group sessions based on Gordon's teachings (1988a and 1988b), whilst the second intervention consisted of 15 craft-making group sessions.

A purposive sample of 45 depressed women was selected and randomly allocated to the three groups. Sample selection criteria included a Beck Depression Inventory score between 9 and 29, being aged between 25 and 65 years and using antidepressant medication. For ethical reasons, all participants continued with their "standard" antidepressant treatment throughout the study.

The Personal Profile Questionnaire (PPQ), the Beck Depression Inventory Scale (BDI) 1978, the Rosenberg Self-Esteem Scale (RSE) 1965, the Life-Experience Survey (LES) 1977 questionnaire and a question on exercise were used to assess the effectiveness of the group interventions. Pre-test (prior to the introduction of the intervention) and two sequential Post-test scoring (after 6 and 12 weeks of interventions) were undertaken using the above-named instruments.

The Kruskal Willis and Friedman's test were used to detect changes in levels of depression and self-esteem between and within the three groups respectively, at the  $p = 0.05$  levels of significance. The intergroup comparison showed statistically significant improvements in the BDI score of Experimental groups 1 and 2, with  $p = 0.00$ .



There were no changes in the Control group. The intra-group comparison showed statistical significant improvements during the study within the intervention groups ( $p = 0.00$  in both cases) but not in the Control group.

No statistically significant change in the RSE amongst or within the three group was detected.

The study has shown that group interventions as an adjunct to antidepressant treatment are beneficial as rehabilitation programmes for depressed women. Furthermore, volunteers and psychiatric nurses with training in using group interventions may be useful in assisting depressed patients to enhance their quality of life.

<b>TABLE OF CONTENTS</b>		<b>pages</b>
<b>CHAPTER ONE: THE PROBLEM AND ITS SETTING</b>		
1.1	Introduction	1
1.2	Background to the problem	1
1.3	The aim of the study	4
1.4	The objectives of the study	4
1.5	Hypotheses	5
1.6	Assumption	7
1.7	Significance of the study	8
1.8	Definitions of terms	9
1.9	Conclusion	11
<b>CHAPTER TWO: LITERATURE REVIEW</b>		
2	Introduction	13
2.1	Epidemiological and conceptual aspects of depression	15
2.1.1	The extent of depression in populations	15
2.1.1.1	The extent of depression internationally	15
2.1.1.2	The extent of depression in South Africa	16
2.1.2	Morbidity and mortality associated with depression	18
2.1.3	Women and depression	20
2.1.3.1	Age and depression in relation to women	20
2.1.3.2	Risk factors for women with depression	21
2.1.3.3	Women's patterns of health seeking behavior for depression	24
2.1.4	Depression in Indian women	24
2.1.4.1	The status of Indian women undergoing cultural transition	24
2.1.4.2	Acculturation and the patriarchal system	25

2.1.4.3	Indian marriages	27
2.1.4.3.1	Indian marriages in India	27
2.1.4.3.2	Indian marriages in South Africa	28
2.1.4.4	Indian women with poor coping skills	28
2.1.4.5	Midlife depression in Indian women	29
2.1.5	Theories associated with the causation of depression	30
2.1.5.1	Levisohn's behavioral model	31
2.1.5.2	Seligman's learned helplessness model	31
2.1.5.3	Beck's cognitive model	32
2.1.6	Self – esteem and gender in women	33
2.1.6.1	Self – esteem	33
2.1.6.2	Depression in relation to self-esteem and women	34
2.2	Depression-definition, classification and diagnosis	35
2.2.1	Definition of depression	36
2.2.2	Problems of diagnosing depression	36
2.2.3	Classification and types of depression	37
2.2.4	Clinical features essential when formulating a diagnosis of depression	39
2.3	The management of depression	40
2.3.1	Prerequisites for assessment and planning the management of depression	41
2.3.2	Drug therapy: Antidepressants	41
2.3.2.1	The use of antidepressants in relation to the different phase of depression	42
2.3.2.2	Response times and rates of antidepressant usage	43

2.3.2.3	Antidepressants in common use in South-Africa	43
2.3.2.4	Essential drug programs	44
2.3.2.5	Effective prescription of antidepressant medication	45
2.3.3	Group therapies for the management of depression	46
2.3.3.1	Subtypes of group therapies according to modalities	47
2.3.3.1.1	Psychotherapy in group	47
2.3.3.2	Aspects relating to the functioning of groups	53
2.3.3.3	The role of the person running the group	54
2.3.3.3.1	The role of the facilitator	54
2.3.3.3.2	The role of the volunteer	55
2.3.3.4	Description of group therapies that have been successful with depressed patients	55
2.3.3.4.1	A psychiatric out – patient support group in a rural area	55
2.3.3.4.2	Group cognitive therapy for depressed elderly patients	56
2.3.3.4.3	Group therapy with chronically depressed geriatric patients	57
2.3.3.4.4	A psycho-educational group for depressed women	59
2.3.3.4.5	Gordon’s cognitive behavioral therapy	60
2.4	Exercise	61
2.5	Conclusion	64

### **CHAPTER THREE: RESEARCH METHODOLOGY**

3.1	Introduction	64
3.2	Research design	64
3.3	Hypothesis	64
3.3.1	Hypothesis 1	65
3.3.2	Null hypothesis 1	65

3.3.3	Hypothesis 2	65
3.3.4	Null hypothesis 2	65
3.3.5	Hypothesis 3	65
3.3.6	Null hypothesis 3	66
3.3.7	Hypothesis 4	66
3.3.8	Null hypothesis 4	66
3.3.9	Hypothesis objectives 5 and 6	66
3.4	Study setting	67
3.5	The study population	67
3.6	Sampling strategy	67
3.6.1	Method of sampling	67
3.6.2	Sample size	68
3.6.3	Sample selection criteria	68
3.6.3.1	Inclusion criteria for the sample	68
3.6.3.2	Exclusion criteria for the target population	69
3.6.4	Recruiting and selecting the sample	70
3.6.5	Randomization of the sample	71
3.7	Measurements	72
3.7.1	The personal Profile Questionnaire	72
3.7.2	The Beck Depression Inventory Scale	73
3.7.2.1	Description of the BDI Scale	73
3.7.2.2	Scoring of the BDI Scale	74
3.7.2.3	Reliability and validity of the BDI Scale	74
3.7.3	The Rosenberg Self – Esteem Scale	75
3.7.3.1	Description of the RSE Scale	75

3.7.3.2	Scoring of the RSE Scale	76
3.7.3.3	Validity and reliability of the RSE Scale	77
3.7.3.4	Limitation of the RSE Scale	77
3.7.4	The Social Readjustment rating Scale	78
3.7.4.1	Description of the SRRQ Scale	78
3.7.4.2	Limitation of the SRRQ Scale	79
3.7.5	The Life Experiences Survey Scale	79
3.7.5.1	Description of the LES Scale	79
3.7.5.2	Scoring of the LES Scale	79
3.7.5.3	Validity and reliability of the LES Scale	79
3.7.5.4	Limitation of the LES Scale	80
3.7.6	Assessment of exercise levels	80
3.8	Pilot study	80
3.9	The interventions	81
3.9.1	Nurse-facilitated group interventions	83
3.9.1.1	The role of the facilitator	83
3.9.1.2	The venue and equipment for the group sessions	84
3.9.1.3	Nurse-facilitated group sessions	84
3.9.1.4	Feedback of the nurse-facilitated group sessions	93
3.9.2	Volunteer-led group sessions	106
3.9.2.1	The role of the volunteer	106
3.9.2.2	The choice of the volunteer	107
3.9.2.3	The venue and equipment for the group sessions	107
3.9.2.4	The volunteer-led group sessions	110
3.9.2.5	Feedback from the volunteer-led group sessions	110

3.9.3	Non-intervention group	111
3.9.3.1	Description of the group sessions	111
3.9.3.2	Feedback from the control group	112
3.10	Duration of the study	112
3.11	Ethical aspects	114
3.12	Data analysis	116
3.13	Limitations	117
3.14	Conclusion	118

## **CHAPTER FOUR: ANALYSIS AND DISCUSSION OF FINDINGS**

4.1	Introduction	119
4.2	Socio-demographic findings	119
4.2.1	Marital status	119
4.2.2	Level of education	112
4.2.3	Employment status	123
4.2.4	Age categories	125
4.2.5	Duration of antidepressant use	127
4.2.6	Antidepressants used by the whole sample	130
4.2.7	Conclusion	131
4.3	The effectiveness of the interventions in terms of the level of depression	132
4.3.1	Introduction	132
4.3.2	Descriptive statistics	133
4.3.2.1	BDI score at Pre-test of the whole sample	133
4.3.2.2	BDI score at Pre-test of three groups	133
4.3.2.3	BDI score at pre-test 1 of the whole Sample	135

4.3.2.4	BDI score at Post-test 1 of the three groups	136
4.3.2.5	BDI scores at Post-test 2 of the whole sample	136
4.3.2.6	BDI scores at Post-test 2 of three groups	138
4.3.2.7	Mean BDI scores of the three groups at the three scoring sessions	140
4.3.3	Inferential statistics	141
4.3.3.1	Intergroup comparisons of the BDI scores	142
4.3.3.2	Comparison of the Pre-test scores of the three groups using the BDI	142
4.3.3.3	Comparison of the Post-test 1 score of the three groups using the BDI	143
4.3.3.4	Comparison of the Post-test 2 score of the three groups using BDI	144
4.3.4	Intergroup comparison of the BDI scores	145
4.3.4.1	Comparison of the BDI scores within Experimental group 1	145
4.3.4.1.1	Conclusion	146
4.3.4.2	Comparison of the BDI within Experimental group 2	146
4.3.4.2.1	Conclusion	147
4.3.4.3	Comparison of the BDI scores within the control group	147
4.3.4.3.1	Conclusion	147
4.3.5	Conclusion	147
4.4	The effectiveness of the interventions in terms of the level of self-esteem	148
4.4.1	Introduction	148
4.4.2	Descriptive statistics	148
4.4.2.1	RSE scores of the whole sample at Pre-test	148



4.4.2.2	RSE scores for the three groups at Pre-test	149
4.4.2.3	RSE scores of the whole sample at Post-test 1	150
4.4.2.4	RSE scores for the three groups at Post-test 2	150
4.4.2.5	RSE scores of the whole sample at Pre-test 2	151
4.4.2.6	RSE scores of the three groups at Post-test 2	152
4.4.3	Inferential statistics	153
4.4.3.1	Intergroup comparison of the RSE scores	153
4.4.3.2	Comparison of the Pre-test scores of the three groups using the RSE	154
4.4.3.2.1	Conclusion	155
4.4.3.3	Comparison of the Post-test 1 scores of the three groups using the RSE	155
4.4.3.4	Comparison of the Post-test 2 scores of the three groups using the RSE	156
4.4.3.4.1	Conclusion	157
4.4.4	Intergroup comparison of the RSE scores	157
4.4.4.1	Comparison of the RSE scores within the Experimental group 1	157
4.4.4.1.1	Conclusion	158
4.4.4.2	Comparison of the RSE scores within the Experimental group 2	158
4.4.4.3	Comparison of the RSE scores within the Control group	159
4.4.4.3.1	Conclusion	159
4.4.5	Conclusion	159
4.5	Analysis of the results of the LES	160
4.5.1	Introduction	160
4.5.2	The timing of the life events of the whole sample	160

4.5.3	The timing of the life events of the three groups	161
4.5.3.1	Conclusion	162
4.5.4	Perceived impact of life events by the whole sample	162
4.5.4.1	Conclusion	163
4.5.5	The specific life events	164
4.5.5.1	Conclusion	167
4.5.6	Conclusion	171
4.6	Analysis of the results of perceived exercise levels	171
4.6.1	Introduction	171
4.6.2	Exercise levels of the whole sample at Post-test 1	172
4.6.3	Exercise levels of the whole sample at Post-test 2	173
4.6.4	Exercise levels for the three groups at Post-test 1 and Post-test 2	173
4.6.5	Conclusion	175

## **CHAPTER FIVE: CONCLUSION AND RECOMMENDATION**

5.1	Introduction	175
5.2	Overview of findings	175
5.3	Recommendations	177
5.4	Conclusion	179

<b>LIST OF REFERENCES</b>	<b>180</b>
---------------------------	------------

## **CHAPTER ONE**

### **THE PROBLEM AND ITS SETTINGS**

#### **1.1 Introduction**

The commonality of depression in South Africa as a mental health problem, as well as it being a major contributor to disability, needs to be addressed urgently. The current status of mental health is low within the public health system. In addition there is a concomitant low staff high patient ratio both in the urban and rural areas. (South African Health Review, 1999). Increased workloads and an increased number of patients in the public sector have caused overcrowding, contributing to the low morale and negative image of South African nurses. (Buys and Muller, 2000).

Specialist such as psychiatrist and psychologists are not available at many public health clinics. Also nurse are expected to perform some tasks that are normally performed by these specialists. (South African Health Review, 1999; Zuma, 2003). The researcher believes that professional nurses, with a psychiatric qualification could be equally efficient in providing appropriate and cost-effective service to patients. This could assist in reducing depression-associated morbidity by providing support and referring clients to a more specialized level of care, if necessary.

Antidepressant medication is generally used as first – line treatment for the treatment of depression. Non-pharmacological modalities of treatment include psychotherapy, group cognitive therapy, group counseling, creative expression groups, community support groups, exercise, art and music therapies. (Shearer and Adams, 1993).

#### **1.2 Background to the problem**

Depression is one of the most common mental health problems at one of the busiest urban community psychiatric clinics in KwaZulu-Natal. A preliminary retrospective study was done using patient's personal clinic files.

The records reflected that over one-third of the new clients seen during 1997 were diagnosed with depression. In May 1998, 119 depressed female clients were identified as having received antidepressant medication for six months or longer. The daily patient attendance at this clinic ranges from 100 to 150.

A maximum number of 3000 patients was seen monthly at this public psychiatric clinic compared with a monthly average attendance from 70 to 1800 at other clinics in this region. (Lawson, 2004). This indicates that the clinic is extremely busy. The clinic operates from Monday to Fridays, from 07h30 to 16h00. The clinic was busiest in the mornings, as the medical and pharmacy staff were only available until noon. In the absence of these medical and pharmacy staff the psychiatric nurses continue rendering routine and emergency psychiatric nursing care. The clinic was relatively well staffed by multidisciplinary team members, namely one clinical psychologist, three psychiatrists, who worked on three different morning sessions and three psychiatric medical officers, who worked in the mornings only, but who also relieved at other clinics. There were eight full-time nursing staff. One was an auxiliary nurse, two were enrolled nurses, who were trained in general nursing only, and five were professional psychiatric nurses. No social workers were available at the clinic, but if one was required referral was made to a specific social worker, who operated nearby. There was also an occupational therapy department adjoining the clinic, with three registered occupational therapists and one occupational therapy assistant.

The clinic services were mainly rendered by psychiatric nurses. The role and functions of these nurses were in keeping with clinic procedures, the Department of Health duty sheet (Z249) and the South African Nursing Council Regulation Scope of Practice R2598.

- screen new clients
- review clients, who attend for their specified monthly clinic appointments

- attend to crises in the clinic in the clinic in respect of staff, patients, and any member of the community
- act as consultants and provide information for clients and professionals from other services, who require advice and assistance
- refer clients to other agencies and community resources as required
- undertake individuals and family counseling where indicated; and
- conduct home-visits for clients that are bedridden or those who cannot reach the clinic.

No group interventions were being undertake with the clients, who were attend in the clinic. The nurse facilitated cognitive group intervention had been demonstrated to reduce symptoms of depression in Great Britain and the United States of America. (Gordon, 1988 in Abbott and Sapsford, 1992). However, little research on the effectiveness of Nurse-facilitated cognitive group interventions has been conducted in South Africa. Therefore the researcher proposed to introduce and evaluate a similar modality of treatment at this clinic. This type of group intervention could:

- assist in enhancing and empowering the depressed patients; and
- could be relatively cost effective as the groups could be run by experienced psychiatric nurses.

The research further proposed to introduce a Volunteer-led crafts group, which could also be less demanding and would not require the services of a trained psychiatric nurse. According to Bartho, Flynn and Sparks (2000), purposeful activity has been shown to keep people positive and happy and does not give them time for idle worrying about problems or being negative about themselves. Therefore, a group intervention consisting of creative, purposeful activities, led by a volunteer may be a useful adjunct to antidepressant medication.

If this was found to be effective, the nurse could be used for other duties in such clinics, whilst a skilled volunteer could run a crafts group. This would assist with staff shortages.

The problem of budget cuts and drastic shortages of staff, due to emigration and privatization are creating a negative impact on services delivery in South Africa. (Baumann 1998).

Research of this nature has not been conducted at this clinic before, and hopefully the study would help in finding innovative solutions and in improving patient care in the already overload clinics.

### **1.3 The aim of the study**

The aim of the study is to determine and compare the effectiveness of a Nurse-facilitated cognitive group intervention, a Volunteer-led crafts group intervention and a standard treatment Control group of mild to moderately depressed Indian women receiving antidepressant medication at an urban community psychiatric clinic in Kwazulu-Natal.

### **1.4 The objective of the study**

These are to:

1. Determine the effectiveness of a Nurse-facilitated cognitive group intervention as an adjunct to antidepressant medication on mild to moderately depressed Indian women in terms of subjective findings (levels of depression and self-esteem) over a fixed period of time.
2. Determine the effectiveness of a Volunteer-led Craft group intervention as an adjunct to antidepressant medication on mild to moderately depressed Indian women in terms of subjective findings (levels of depression and self-esteem) over a fixed period of time.
3. Determine the effectiveness of standard treatment on the Control group on mild to moderate depressed Indian women in terms of subjective findings (levels of depression and self-esteem) over a fixed period of time.

4. Compare the effectiveness of the Nurse-facilitated Cognitive group intervention and the standard treatment Control group in terms of the levels of depression and self-esteem in mild to moderately depressed women.
5. Describe the occurrence, type and perceived impact of life-events prior to and during the study amongst mild to moderately depressed Indian women in the three groups respectively.
6. Assess whenever there was a change in the perceived levels of exercise which could have influenced the levels of depression in mild to moderately depressed Indian women in the three groups respectively.

## **1.5 Hypotheses**

Statements about the relationship between variables that the researcher expected to find as a result of the study are defined as Hypotheses. (Polit and Hungler, 1997). The following were hypotheses that this study aimed to test.

### **Hypothesis 1**

It was hypothesized that a Nurse-facilitated cognitive group intervention as an adjunct to antidepressant medication and standard treatment would have a positive effect on the levels of depression and would enhance the levels of self-esteem in mild to moderately depressed Indian women.

### **Null hypothesis 1**

The null hypothesis stated that the Nurse-facilitated cognitive group intervention as an adjunct to antidepressants medication and standard treatment would have no effect on the levels of depression and self-esteem in mild to moderately depressed Indian women.

## **Hypothesis 2**

It was hypothesized that a Volunteer-led crafts group intervention, as an adjunct to antidepressant medication and standard treatment would have a positive effect on the levels of depression and would enhance the levels of self-esteem in mild to moderately depressed Indian women.

## **Null hypothesis 2**

The null hypothesis stated that the Volunteer-led crafts group intervention, as an adjunct to antidepressant medication and standard treatment would have no effect on reducing the levels of depression and would not enhance the levels of self-esteem in mild to moderately depressed Indian women.

## **Hypothesis 3**

It was hypothesized that the standard treatment Control group would have a positive effect on the levels of depression and would enhance the levels of self-esteem in mild to moderately depressed Indian women.

## **Null hypothesis 3**

The null hypothesis stated that the standard treatment Control group would have no effect on reducing the levels of depression and would not enhance the self-esteem levels in mild to moderately depressed Indian women.

## **Hypothesis 4**

It was hypothesized that a Nurse-facilitated cognitive group intervention and the Volunteer-led crafts group intervention in comparison to the standard treatment Control group would have a positive effect on the levels of self-esteem in mild to moderately depressed Indian women.



#### **Null hypothesis 4**

The null hypothesis stated that the Nurse-facilitated cognitive group intervention and the Volunteer-led crafts group intervention in comparison to the standard Control group would have no effect on reducing the levels of depression and would not enhance the levels of self-esteem in mild to moderately depressed Indian women.

#### **Hypotheses for Objectives 5 and 6**

Hypotheses for Objective 5 and 6 were not set up because the type of assessment was not appropriate for inferential statistical analysis.

### **1.6 Assumptions**

Depression follows a bio-psychosocial paradigm, whereby the individual is managed holistically. Physical and psychosocial aspects are equally important. This includes a more interactive, supportive environment for depressed patients that is conducive to community-based psychiatry. It is assumed in this study that if depression is diagnosed and treated early, the likelihood of relapse and severe depression could be prevented or reduced. (Lader, 1997; McGillivray and Reid, 2001) with the appropriate use of maintenance pharmacological treatment and follow-up measures, the mild to moderately depressed person might cope more adequately with his illness, than without such interventions.

However, this condition may become chronic and require effective, long-term, ongoing pharmacological and non-pharmacological management. Total elimination of symptoms depends on the severity of the illness. The researcher assumed that the information pertaining to life experiences and exercise was accurately reported by all subjects. It was also assumed that the participants to one group did not influence those in the other groups. The researcher prevented contact between them whilst they attended the clinic during the study. They were also required to refrain from contact with each other. However, it is not known whether these conditions were observed outside of the clinic's premises.

## **1.7 Significance of the study**

Limited research on the effectiveness of Nurse-facilitated cognitive group and Volunteer-led crafts group interventions in managing mild to moderately depressed women has been conducted in South Africa. It is recognized that these interventions may be inappropriate for severely depressed women. (See Chapter Three, Section 3.6.3.2). It is hoped that this study will contribute to nursing knowledge in a meaningful way (Polit and Hunger, 1997). The introduction and the background have shown the significance of this study. Currently, in South Africa there is a gross shortage of psychiatric nurses, creating uncertainty, frustration and low morale amongst the nurses. According to the South African Health Review (1999), in 1998, there were 109,943 out-patients visits of psychiatric patients made monthly to South African public health psychiatric clinics. In addition these existing services had inequities across race and genders in service provision, bed-state and staffing within each province. In the private psychiatric sector the staff–patient ratio was 8: 1 and in the public health sector 36: 1. (South African Health Review, 1999). Despite these deficits nurses are expected to provide optimum patient care.

The community psychiatric nurse, who may also be a primary health nurse, has the first contact with the patient. Therefore, she needs to be resourceful in assisting an empowering clients.

According to a study done by (Mbambo, Uys and Groenewald, 2003) the role of the primary health care worker includes community rehabilitation and health nurses lacked knowledge and understanding of mental illnesses. Therefore Mbambo, Uys and Groenewald (2003) recommended that additional mental health training was needed by these primary health care nurses, to fulfill their roles effectively in diagnosing and treating mental illness.

In view of the staff shortages, it was felt that Verona Gordon's intervention (1988) could be used practically by nurses in assisting groups of mild to moderately depressed women to reduce their levels of depression. Gordon designed a comprehensive, structured group therapy must be implemented in the group sessions. She developed a Facilitator's Manual (1988a) as a guide for the facilitators and a Women's Workbook (1988b) with homework exercises for the women in the group. The topics outlined in her manuals are common to women in the United States of America.

However, the researcher questioned whether this strategy would work with groups of people in another country. Considering that the problems experienced by the American women as documented in the manuals were similar to those of South African Indian women, the researchers felt that it would be worthwhile testing the intervention with these women. (See Chapter One, Section 1.2; Chapter Two, Section 2.3.3.1; Chapter Three, Section 3.9.1; Chapter Four and Appendices 13, 14 and 15).

Volunteers are easily accessible, available and are affordable as they render their services free. The skills learnt by patients in these volunteer-led crafts group could be used to teach individuals or groups possibly initiating home industries. This could help to alleviate boredom, increase finances and give the person a sense of accomplishment, when an item or craft has been completely made.

Apart from the awareness of depression amongst women, hopefully the idea of groups and group interventions could generate interest on the subject by fellow researches, thus increasing the research in this field.

## **1.8 Definition of terms**

The following definitions have been used for the purpose of this study.

### **Antidepressant medication**

Is pharmacological treatment, using a group of oral medication, which was prescribed by the medical officer or psychiatrist for the main purpose of reducing depressive symptoms and improving the patient's mood.

### **Cognitive – behavioral therapy**

Refers to Gordon's Intervention model (Chapter Three, Section 3.9.1) used to treat depression, prevent relapse and correct negative thoughts and behaviors by short-term, structured education sessions based on Beck's cognitive, Seligman's learned helplessness and Levisohn's behavioral model. (Gordon, 1988a : 18-19).

### **Crafts group**

Refers to a group where members were given tools and materials to perform creative self-activities, in making items such as peg-baskets and woolen dolls to be taken home on completion, with the aim of reducing depression and improving self-esteem.

### **Depression**

Refers to a mood disorder, which has already been diagnosed by clinical features or DSMIV (Diagnostic Statistical Manual) by a medical officer or psychiatrist. Characteristics symptoms of depression include the following: depressed mood, marked reduced interest in pleasurable activities, weight gain or weight loss, increase or decrease in appetite, lack of sleep or too much sleep, psychomotor agitation or retardation, fatigue or loss of energy, worthlessness or inappropriate guilt, recurrent thoughts of death or suicide. Five or more of the above symptoms must be present in order to be diagnosis of minor depression. (DSMIV, 1994 : 345). The level of depression was measured using the Beck Depression Inventory Scale.

**Facilitator**

Refers to the psychiatric nurse, who attempted to help members in the group to believe in themselves and explore their own potential, by acting as a resource person for them, by providing guidance, opportunities, direction for interaction between members so that they could grow, develop, make choices and be empowered.

**Psychotherapy**

Refers to verbal and non-verbal techniques by the psychiatric nurse using warmth, genuine concern, empathy, basic trust and listening skills by a psychiatric nurse to assist the mild to moderately depressed patients. Problem solving, positive thinking and the use of effective coping skills are identified and worked through collaboratively between the depressed women and the psychiatric nurse.

**Self-esteem**

Refers to the feeling of wellbeing or self-worth expressed by a person verbally or non-verbally and was measured by the Rosenberg Self-Esteem Scale.

**Standard treatment**

Refers to treatment received monthly, which included collection of antidepressants medication, being interviewed by the medical officer or psychiatrist six monthly or earlier if the need arose.

**Volunteer**

Refers to an adult who was regarded as responsible, mature, helpful and capable who was chosen by the researcher to lead, supervise and assist the members with craft-making activities and who was prepared to work without a salary for the 15 week period.

**1.9 Conclusion**

Since depression is a common condition in South Africa, strategies are needed to reduce depressive levels and improve self-esteem.

Depression in women affects their partners, their children, their families and friends.

Therefore effective treatment modalities, including interventions as adjuncts to antidepressants, need to be available to assist depressed patients to remain stable within their communities.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2. Introduction**

Depression is a significant health problem in South Africa and it is therefore very important to seek effective interventions to cope with this illness.

Depression is a mood disorder that commonly presents itself as a feeling of sadness, loneliness, helplessness, poor morale, low self-esteem and a feeling of inadequacy (McDowell and Newell, 1996; and Uys and Middleton, 1997). Simply, Weissman and Klerman (1977: 98) explained that the term depression represents a mood, a symptom and a syndrome, whose boundaries are not very clear.

Therefore, safe, effective and cost effective interventions that last over a long period are needed. (Gordon, Sumner and McMichael, 1995: 7). This condition is significantly associated with high morbidity, mortality and economic costs to the individual and the country. (Stokes, 1993: 216).

Wasenaar, van der Veen and Pillay (2001: 429) stated that depression was one of the psychiatric conditions frequently studied. They commented that more extensive psychiatric research was needed on aspects of culture and sensitivity to gender in managing this illness in South Africa.

This still appears to be the case. Katzenellenbogen, Joubert and Abdool Karim (1997) noted that cross-sectional, annalistic and management studies were needed to provide practical information to clinicians. Researchers were encouraged to obtain more information on the current support system, clinical severity of the illness, the degree of functional impairment, interviewer's attitude to and knowledge of the availability of psychiatric treatment and mental health resources.

This information was needed in developing psychiatric epidemiology. According to Yach and Kuhn (1989 in Katzenellenbogen, Joubert and Abdool Karrim, 1997) psychiatric epidemiology could play a major role in planning, setting and developing strategies to promote mental health and prevent mental illness. They indicated that it was especially important to identify patients who were amenable for interventions and to assess the efficiency of these interventions in improving mental health. Stein (1998) also advocated the importance of more investment in the prevention and management of psychiatric disorders in the developing world.

Uys (1991) described the paradigm shift from the treatment era to that of psychiatric rehabilitation. The main aspect of the treatment era was the use of medication. The rehabilitation approach according to Uys, was to be conducted by psychiatric nurses using interventions, including aspects such as coping skills, social skills, knowledge of family support, life-events, stress levels and symptom monitoring. Uys further stated that more attention was required, especially from South African psychiatric nurses, as there were major shortcomings in these areas. This need for more training still exists as stated by Mbambo, Uys and Groenewald (2003).

On concluding their study done in KwaZulu–Natal, Mbambo, Uys and Groenewald (2003) recommended that more mental health training of nurses was needed. The primary health care staff involved in this study reported that they were counseling depressed patients and victims of abuse and teaching parenting skills to parents in the clinics. However, Mbambo, Uys and Groenewald's (2003) assessment of these tasks reflected low levels of counseling offered by these nurses to clients with mental illnesses. They recommended that the primary health care staff increase their efforts in mental health education, home visiting, school visits and community projects to ensure community rehabilitation.



Gordon (1988 in Abbott and Sapsford 1992) regarded depression as one of the major health problems of women. She indicated that the current practices in treating women's depression were not satisfactory, as treatment was often only started when depression had reached a serious level. According to Gordon, Matwychuk, Sachs, and Canedy, (1988) a challenge existed for psychiatric nurse researchers in England to formulate and implement interventions, which focused on the needs of depressed women. In addition, Gordon, (1988) described the "revolving door syndrome", indicating the early or premature discharge of a psychiatric patient, often resulting in speedy readmissions to the psychiatric hospital. Inconveniences to families as well as increased expenditure to the health budget were incurred by this syndrome.

Gordon, Matwychuk, Sachs and Canedy (1988) further noted that although there are numerous programs to treat depression, appropriate and accurate timing is essential. On the basis of this, they advocated their group intervention approach as an efficient alternative to traditional psychotherapy or psychiatric hospitalization.

As indicated in Chapter one, this study was undertaken to evaluate the effectiveness of interventions, either facilitated by a psychiatric nurse or led by a volunteer, to reduce levels of depression and improve self-esteem amongst Indian women in a community psychiatric clinic.

In this chapter, literature will be reviewed as a background to the study. The following aspects will be discussed: the epidemiological and conceptual aspects of depression, including the extent of depression in population, women in general and in India women in particular, psychological theories for the increasing rates of depression; self-esteem, depression and gender; problems with diagnosing depression, types and classification of depression, clinical features of depression, management of depression and exercise in relation to depression.

## **2.1 Epidemiological and conceptual aspects of depression**

Epidemiology refers to the science related to the study of factors determining and influencing the frequency, distribution, incidence, prevalence, morbidity and mortality rates, women and depression, high rates of depression, risk factors for depression and women's patterns of health seeking behaviors.

In Africa, psychiatric epidemiological studies have tended to be descriptive and not analytical. They have usually provided information on the illness by focusing on prevalence alone. The main demographic variables that have been examined and studied are age, race and gender associated with the distribution of the population. Decisions taken in psychiatric research have to be culturally and socially acceptable. (Katzenellenbogen, Joubert and Abdool Karim, 1997).

### **2.1.1 The extent of depression in populations**

Depression is an extremely prevalent mental illness, both internationally and in South Africa. (Beck, 1973; Gordon 1988 in Abbott and Sapsford, 1992; Meys, 1998). McGillivray and Reid predicted that by 2020 major depression would be one of the most important causes of ill health amongst the population in the United Kingdom. Uys and Middleton (1997: 326) called depression the "common cold of psychiatry" as it was such a common condition.

#### **2.1.1.1 The extent of depression internationally**

Depression is a global disease. Worldwide depressive disorders contributed to more than 17 % of disability associated with others mental health problems. (Okasha, 1998: 3). Stein (1998: 7) reported that the Global Burden of Disease Study, conducted by the World Health Organization (WHO), showed that depression was placed first in the list of the top ten causes of disability throughout the world in 1990.

In the United Kingdom, 15 % to 30 % of all adults were reported to have a lifetime prevalence of major depression. At least 50 % were detected at family practitioner's practices. (McGillivray and Reid, 2001: 18).

According to Stuart and Laraia (1998), about one in eight adults in the United States of America (USA) may suffer from depression in their lives. This means that 11.5 million people are affected annually, 70 % of which are women. The lifetime risk for depression in men was found to vary from 7 % to 12 % and for women from 20 % to 30 % in the USA. (Stuart and Laraia, 1998).

#### **2.1.1.2 The extent of depression in South Africa**

Research done by the Depression and Anxiety Support Group, has shown that 5 % to 6 % of the population in South Africa, will develop a depressive disorder, during the course of their lives, and nearly two thirds do not get the help they need. (Depression and Anxiety Support Group, undated, Internet reference). Depression affects sexes, all races, cultures and social classes. (Depression and Anxiety Support Group, 1999).

In 1997, Uys and Middleton reported that about 15 % to 20 % of the general population of South Africa presented with depressive symptoms. Uys and Middleton further stated that at least 75 % of psychiatric patients hospitalized in one South African psychiatric hospital were admitted for depression.

Schlebusch (1987: 19) reported that the incidence of affective disorders, one of which was depression, varied widely. It was found to occur in more than 15 % of adults, and affected children, adolescents and the elderly. This illness was the major cause of hospitalizations in the acute psychiatric ward in South Africa.

Depression is also a significant problem amongst all race groups in the Republic of South Africa. In 1992, Oliver (cited in Uys and Middleton, 1997) found 30.6 % of urban Black adults, and 15 % of White, Asian and Colored adults suffered from clinical depression.

Fish (1988, cited in Uys and Middleton 1997) in her study on a cross-section of Indian psychiatric patients in Durban, found that approximately 30 % of Indian women, who attended this clinic, had mood disorders.

In 1995, the Community Agency for Social Enquiry (CASE) conducted a survey on health in South African households. 36 % females and 32 % in males experienced symptoms of anxiety and depression; according to race 32 % Africans, 30 % Indians, 41 % Colored's and 43 % Whites; according to area 40 % from metropolitan areas and 26 % from homelands; 31 % Indians, 28 % Whites, 18 % Africans and 17 % Colored's sought professional help. These statistics showed that the four races experienced anxiety and depression, with 31 % of Indians seeking professional help.

It was reported in a study by Wassenaar van der Veen and Pillay (1998) that there was a relatively high rate of suicide amongst South African Indian women. The incidence of depression was noted to be greater amongst these women than the Indian men. Marital conflict and barriers in communication were key issues experienced by these Indian families in South Africa. In addition, the male spouses abused alcohol and became violent towards their female spouses and children, creating further emotional and economical stress to these families. The women presented with symptoms of chronic tension, helplessness, powerlessness, fearfulness, and had lowered self-esteem levels. In these dysfunctional marriage systems, many Indian women were depressed and some attempted suicide, whilst others needed psychiatric treatment. Many of these women were forced to remain in these abusive marriages due to their economic dependency on their spouses. (Wassenaar van der Veen and Pillay, 1998).

In relation to African patients in Southern Africa Gagliano (2001) refuted the notion that these patients suffered less depression because of the extended families and strong traditional values.

On the contrary, African patients were found to be more vulnerable than other groups to mood disorders, which resulted from the hardships and difficulties experienced in their past.

In 1999, the Depression and Anxiety Support Group of South Africa reported attending to telephone calls on mental health issues, of which two thirds, over 60 % were from depressed individuals. (Depression and Anxiety Support Group, 1999). In 2003, the Depression and Anxiety Support Group had 170 support groups throughout South Africa in response to the growing need for counseling and assistance for this problem. (Depression and Anxiety Support Group, undated).

Depression is a debilitating disease internationally and in South Africa, affecting society as a whole. Long-term studies and more research are needed on the major impact that this disease has on individuals. More specifically, analytical psychiatric research needs to be undertaken, as it is scarce in certain areas of the Republic of South Africa.

### **2.1.2 Morbidity and mortality associated with depression**

Researches suggested that major depression would be one of the most important causes of ill health and the second greatest causes of premature deaths and disability by the year 2020. (McGillivray and Reid, 2001).

Okasha (1998: 3) confirmed through follow-up studies in Egypt on long-term depressed patients, that there was a significant risk for chronicity and relapse amongst depressed patients. These studies reflected that only about 50 % of depressed patients had experienced a single episode of the illness, whilst 20 % endured relapses and the remaining 30 % became chronically depressed. Therefore, depressed patients achieved full remission, recovered but had residual symptoms or relapsed.

Stokes (1993: 216), in a study done in New York on well-being and physical functioning of 11,000 outpatients, found that patients with depression were less functional than patients with other chronic conditions, such as arthritis, hypertension, diabetes and back pain.

Depressed patients also spend more days in bed than those with other chronic illnesses. Cardiac patients were the only ones who were less functional and had a lower score than depressed patients.

Angst (1990), conducted a study in Switzerland on the prevention and treatment of depression, and concluded that 50 % of clients who were depressed experienced only one episode of depression, approximately 20 % had recurrent episodes and between 25 % and 30 % became chronically depressed.

According to Gordon et al. (1988: 219), the social morbidity of depression in women has been found to be high. Close family relationships, marriage and parenting are reported to deteriorate through depressive illness.

This included problems with communication and work performance. Anger, tension and personal dissatisfaction were markedly affected as well. This is further discussed in Chapter Two, Section 2.1.3 of this dissertation.

Zlotnick, Kohn, Keitner and Grotta (2000: 206) stated that poor family functioning occurred often, during the acute phase of depression. The depressive symptoms experienced by the patient, interfered with the supportive relationship that was needed.

Schlebusch (1987: 19), indicated that relapse for a short period after recovery from depression, was found to be about 25 % within 12 weeks. Recurrent depression was far higher in a patient who had a second episode of the illness. It increased with each succeeding episode and the tendency for intervals between the episodes to get shorter, as the person aged. The most serious consequences of depression is suicide. Stroke (1993: 216), Stuart and Laraia (1998), Uys, and Middleton (1997) have all indicated that 15 % of the severely depressed individuals reportedly commit suicide.

Hume and Wynchank (2000) mentioned that depression was a serious disorder, and that it was the highest risk factor for suicide in South African society.

More women attempt suicide, but more men successfully complete the suicide attempts with fatal outcomes. (National Institute of Mental Health, 2001).

### **2.1.3 Women and depression**

Maynard (1993a) and Townsend (1996) have indicated that the incidence of depression in women is higher than that of men. In fact, many authors state that depression occurs twice as often in women as in men. (Berk, 2000; Depression and Anxiety Support Group 1999; Gagliano 2001).

Many explanations for women having more depression than men have been advanced. These include biological and socialization factors relating to women.

Maynard (1993a: 10) theorized that depression in women might be due to their learned helplessness and negative thinking patterns. She also noted that early socialization experiences differed for men and women. Social conditions created different social pressures on women. Women with depression present with more psychological symptoms due to stress and powerlessness characterized by the traditional female roles, such as domestic, personal, family, social, work and cultural roles.

The possible reasons for the high rates of depression in women are discussed throughout the rest of this section.

#### **2.1.3.1 Age and depression in relation to women**

According to Stuart and Laraia (1998), depression rates in women peak between adolescence and early adulthood. They further confirmed that this holds true for other cultures and traditions. However, Meys (1998) stated that women's mean age of onset for major depression was 40 years of age. He also stated that any age group might be affected by depression, namely children, adults, the middle aged and the elderly.

Weissman (1981 in Gordon et al, 1988) found that depression affected women in their youthful productive years of life, as indicated by the research over 44 years in 30 different Western countries. Weismann and Klerman (1977: 98) found that the rate of depression of women in every age group was higher than that of men. It was also reported that depression was more common in women, especially between the ages of 25 to 44 years. (National Mental Health Association, 2000).

Despite the reported differences in the peak age of occurrence, it is clear that women have higher rates of depression than men do.

### **2.1.3.2 Risk factors for depression**

There appears to be a wide range of risk factors for depression in women. One of the reasons for this may be that women placed greater value on relationships with other people, in comparison to men (Walker, 1994). Rosenberg (1965) ascribed the higher rate of depression in women to their low self-esteem. This is further described in Chapter Two, Section 2.1.6.2 of this dissertation.

A few studies on risk factors precipitating depression will be discussed.

Barbee (1992: 259) described the risk factors for depression affecting African American women. She identified violence of a criminal and intimate nature, being poor, being between the ages of 18 and 45 years of age, being unemployed, having less than a high school education, the presence of minor children in the household, and being divorced or separated, as factors which led to depression. Their social class, race, gender, oppression and lack of empowerment were also factors, which added to their depressing life situations.

Steiner (1998: 8) reported that there was a high prevalence of domestic violence in South Africa, which was associated with anxiety and depression symptoms. The women survivors of such domestic violence in all female patients. He added that these patients need to be assessed and referred appropriated for psychiatric interventions.



Stuart and Laraia (1998) reported that certain events, such as childhood physical and sexual abuse, were associated with the greater prevalence of depressive symptoms in women. Rejection by both parents, little warmth and attention shown by fathers, problems due to family conflicts, separation anxiety as a child, and chronic physical illness and deaths of family members were stresses experienced by these depressed women. Such experiences fostered low self-esteem, hopelessness, self-blame and social isolation amongst the women. These aspects are further described in this chapter, in the section relating to self-esteem (Chapter Two, Section 2.1.6), depression and the theories on the causes of increased depression women. (Chapter Two, Section 2.1.5).

Nair (1998: 14) investigated the psychiatric morbidity of female patients with a terminal disease in South Africa. This study revealed the convert emotional effects that were experienced by these patients of the African cultural group and were often neglected by health workers. She reported that patients do not always present in the typical manner of depression. Vulnerability factors such as poor motivation to survive, the helplessness and clinicians when assessing females should note anxious pre-occupation with which these patients present. 54 % of the patients in this sample presented with depressive disorders and 56 % had adjustment, anxiety and/or alcohol dependence due to a general medical condition. She also noted that depression is common in general wards, although it may not be visible on observation only. Therefore, illness is a risk factor for depression.

Stress also appears to play an important role in the development of depression. Gordon et al. (1988), Maynard (1993a), Stuart and Laraia (1998) as well as Allwood and Nair (2001) reported life stressors such as family, financial social, cultural, personal, medical problems demanding and multiple roles, work problems, ageing, death of a spouse, children leaving home, marriage, divorce, marital conflicts and the increasingly changing society, as the chief contributing precipitators for depressive illness.

Stuart and Laraia (1998) reported about research conducted on the relationship between life events and depression. Depressed patients reported experiencing approximately three times more life events during the six months prior to the onset of their illness. There are clinicians who are convinced that there is a relationship between the occurrence of life events and depression, whilst others believe that it merely contributes to the timing and onset of the acute phase. (Stuart and Laraia, 1998).

In a study done in Kenya on professional women with depression (Njenga, 1998: 11), it was reported that women with low levels of social support showed higher levels of stress. According to Njenga, the numbers of women entering professions have increased over the past 20 years. These professional women were registered nurses, lawyers, accountants and doctors. Challenges faced by these women in their daily lives were of being women, professionals, mothers, wives and daughter-in-law. This created conflicts and additional stress. Generally, they presented with depressive symptoms, lacked adequate coping skills towards stressful situations, were very tearful and complained of being less energetic.

Stress has been to have the same effect on men and women, but women responded with higher symptom intensity than men. Women experienced higher mental health risks, which were triggered by gender problems specific to women, including menstruation, rape, pregnancy, abortion, miscarriages, stillbirth, childbirth, menopause, hysterectomy and longer life expectancies. (Allwood and Nair, 2001).

Walker (1994) reported that women, who are at home with young children, are especially at risk for depression. In a study of mothers of three-year-old children, at least one third of these mothers were depressed in the previous year.

### **2.1.3.3 Women's patterns of health seeking behavior for depression**

Women with depression are reported to have increased the costs of health care. They make repeated visits to their family practitioners for the treatment of psychosomatic conditions. Admission rates to psychiatric hospitals are high. In addition, they have increased rates of use of outpatient facilities and make more use of prescriptions for medication for depression. In comparison to men, women seem to seek help more readily for depression, than men. It is possible for this reason that men appear to have higher suicide rates. (Maynard 1993: 277).

In conclusion, women are a high risk for depression, they have different stresses and needs from men, more attention and interventions should be directed towards managing depression in women.

### **2.1.4 Depression in Indian women**

#### **2.1.4.1 The status of Indian women in a society undergoing cultural transition**

The status of Indian women in South Africa has been largely influenced by attitudes embracing the traditions and cultural practices from India. In the previous decades, Indian women were protected and dominated by men as a young girl by her father, in marriage by her husband and in her old age by her son. (Bhana, 1981). According to Mantzaris (1988: 112), the role of the South African Indian family was to provide safety and security for the members of the family. Children of these families had to be raised in a proper Indian disciplined manner. Respect and family unity were to aspects that had to be present in these families.

These particular trends have changed in today's society. Historically, Indian women were not encouraged to plan careers. They were to expect to take care of the family as mothers and homemakers. Economic dependency on the husband and lack of entitlement to a personal income was part of the ascribed social norms.

Indian women were not allowed to smoke cigarettes, drink alcohol and were excluded from political and economical arenas. Preservation of cultural norms was their chief responsibility. Subdued, submissive and passive women earned the title of being good women. Maintaining obedience to these cultural norms and boundaries created great tension and conflict within the Southcorp African Indian women, who were becoming modernized. This conflict sometimes precipitated depressive symptoms and suicidal behavior with severe depression. (Bhana, 1981). Conflict and depressive symptoms emerged in relationships or families that had pre-existing problems with communication and interaction. (Wassenaar, van der Veen and Pillay, 2001). These issues appear to have created the helpless and powerless symptoms and feelings, referred to by different theorists, as described later in Chapter two, Section 2.1.5.

South African Indian women are vulnerable to the stresses of cultural transition of their generation as they belonged to a “previously non-dominant group” as compared to their peers of the “previously dominant white group”. In addition, factors such as spousal abuse, unemployment, lack of marital support and the male dominance added to their vulnerability to stress. (Wassenaar, van der Veen and Pillay, 1998: 84). The interaction of the different cultures created cultural blurring of norms and boundaries, at individual, family and cultural group levels. The South African “rainbow nation” increased the cross-cultural contact between Indian women and women of different races, thus increasing the empowerment of these Indian women. (Wassenaar, van der Veen and Pillay, 1998: 82).

#### **2.1.4.2 Acculturation and the patriarchal system**

According to Wassenaar, van der Veen and Pillay (1998) acculturation and patriarchal system had a great influence on the lives of the traditional Indian family during the 21<sup>st</sup> century in South Africa. Acculturation resulted from an exchange of cultural, social and individual norms and lifestyle from the Western-English speaking family to the traditional Indian South African family.

In exchange for the Western culture, cultural values and norms from the Indian cultural groups were lost. The system of patriarchy entitled the husband or head of the family to a superior, dominant and more powerful role and status in comparison to the wife. This system of cultural exchanges created cultural tension within the immediate family, and instability in individuals. Conflicts were related to relationship, interaction and communication problems. These problems emerged from acculturation and patriarchy, precipitating and creating depressive symptoms. (Wassenaar, van der Veen and Pillay, 1998: 83).

Urbanization and westernization affected the traditional living patterns of South African Indian families. Indian families usually lived together as a unit, in an extended family arrangement. The nuclear family system is the choice of modern day families. (Mantzaris, 1988: 111).

Modernization and socialization created South African Indian women, who were more assertive, more liberated, westernized, pursued tertiary education, applied for positions which were previously male-dominated and made important decisions for themselves, their families and societies. (Wassenaar, van der Veen and Pillay, 1998). Although Indian culture still expected the duty of the women to be primarily as one to serve the needs of her husband and her family, changes emerged from economic opportunities, better education, and the adoption of Western values. This adversely affected their marriages and their quality of their lives in relation to their changing roles. (Wassenaar, van der Veen and Pillay, 1998: 85).

Tension between the Indian culture and Westernization resulted in major conflicts and relationship difficulties for the men and women. Some younger women who were redefining their positions, traditions and customs found that their spouses were delayed in implementing these changes.

This had serious negative implications for the couple leading to disagreements, increased conflict, marital problems, abuse, negative attitudes and behaviors. These women especially, were regularly exposed to the stresses of cultural transition, causing depressive symptoms. (Wassenaar, van der Veen and Pillay, 1998).

Some of the women became severely depressed and inevitably committed suicide or presented with suicidal behavior. (Wassenaar, van der Veen and Pillay, 1998). Bhana reported that there was evidence of high rates of suicidal behavior amongst Indian women in the Republic of South Africa. It was because of some of these women being socialized to accept restriction, which prevented them from openly expressing hostility. (Bhana, 1981).

#### **2.1.4.3 Indian marriages**

##### **2.1.4.3.1 Indian marriages in India**

Seymour (1999) conducted a study done on Indian women and marriages in Orissa, India. Her findings are described hereafter. Marriages were arranged soon after the birth of a child. The groom selected was usually a fellow villager. By the age of 12 the couple were usually married, but were not expected to leave their parents home. This type of marriage system kept multigenerational households together. Some joint families consisted of as few as four to as many as 24 family members who lived together in the same household. Ideally, young girls in India were socialized to be hard working, obedient and self-sacrificing. In order to enhance their chances of marriage and maintain family honor the girls had to remain sexually pure. These qualities were to assist in being accepted as wife's and daughter-in-laws in their new households. The initially shy wife and daughter-in-law had to transform into a forceful, mother, mother-in-law and grandmother to fulfill her role in the marital family. After marriage, sons were allowed to reside in their parental households. Wives, as part of the exchange system, were expected to move in and live in the joint family household of their husbands. Inheritance was transferred to the males, as well as authority over women.

Marriage had to be arranged within the context of the hierarchy or caste system, which was defined through wealth, occupation and status brides' family had to provide property (dowry) to the in-laws to cement the family ties and to raise the family status. Motherhood could improve the female status, especially if males were born. Nursing mothers were expected to sleep with their young children instead of their husbands.

However, the traditional role of Indian women in India is changing and many have completed schooling, college or university education and their marriage choices. (Seymour, 1991).

#### **2.1.4.3.2 Indian marriage in South Africa**

In 1981, Bhana noted that whilst arranged marriages were still occurring, they were steadily declining amongst South African Indian families. The choice of a marriage partner based on romantic love was being accepted in some Indian families, provided that certain necessary conditions, such as being of similar religious beliefs, were met. Ramouthar (1992), explained that the mergence of the factory industry, created employment for many South African Indian women. The multiple roles, including being a traditional as well as a modern, working wife in different respects, led to conflicts in marriages. This progression from homemaker to working wife also had adverse consequences. It resulted in many children lacking adult supervision, and experiencing behavioral and emotional problems. It also challenged the role of the partner in the home, creating marital as well as emotional problems for the women. These pressures and added stressors resulted in the occurrence of depressive symptoms in some Indian women, due to the unrealistic demands placed on them. (Ramouthar, 1992).

#### **2.1.4.4 Indian women with poor coping skills**

Indian women with poor conflict resolution skills were reported by Wassenaar, van der Veen and Pillay (1998) to be more prone than other cultural groups to depressive symptoms and suicide. Severe depression, due to feelings of helplessness and hopelessness, led to self-behaviors indicating suicide. (Wassenaar, van der Veen and Pillay, 1998.)

In another study by Pillay and Vawda (1989) on South African Indian women who attempted suicide, found that 66 % were married, and 88 % of these women reported that marital conflict had led to their suicidal behavior. More than half (51.5 %) of the conflicts experienced by these women, were violent in nature and in addition 49 % reported abuse of substances by their husbands.

Substance abuse and abusive behavior by their male partners had further worsened the severe emotional and economic stress in the home. Women with young children often developed a low self-esteem and a sense of hopelessness about the future, which interfered with the execution of their parental duties. (Wassenaar, van der Veen and Pillay, 1998). They were oppressed, reduced to the status of children, with little or no say in managing their personal or family lives. Their options for a solution were often limited. Returning to their paternal home was discouraged, as it was likely that they would be advised to return to their spouse and tolerate the spousal abuse inflicted on them. Suicide is an option these women choose to escape from their intolerable and abusive life situations. (Wassenaar, van der Veen and Pillay, 2001).

#### **2.1.4.5 Midlife depression in Indian women**

A study on the incidence of midlife depression amongst South African Indian women, who attended a psychological clinic, was conducted by Pillay (1988) over a two-year period. Clinical depression was found in 57.1 % of them. The majority were referred to the psychological clinic, primarily because of somatic complaints not associated with any organic cause. The women were unaware of their mood changes and the unfulfilled expectations, which they had of themselves. Subjective complaints reported by the women were those of feeling lonely and isolated, due to the “empty-nest syndrome”.



Life-events such as unemployment, changes in Closeness of the family, son or daughter leaving home were some of the life-events experienced by depressed patients with midlife depression. It was established that many young adults were leaving their extended families to start their own nuclear homes, and were breaking away from the traditional family system. It was further reported that the traditional Indian mother was unprepared for her children leaving home, compared to the English and American mothers. Some of these mothers were unemployed, lived in close harmony, and were dependant materially and emotionally on their children. Hormonal, psychological and social changes experienced by some middle-age women disturbed the balance in their lives. These problems contributed to depressive symptoms in some of these women. (Pillay, 1988).

The occurrence of depression in South African Indian women has been discussed in relation to the changing status of these women, marriage, loneliness amongst the middle aged, and nuclear family systems. This has been described in studies from as far back as 1981

(Bhana, 1981) to as recently as 1998 (Wassenaar, van der Veen and Pillay, 1998). Indian women remain vulnerable to stress and depression due to changing culture and traditions.

### **2.1.5 Theories associated with the causation of depression**

There are numerous theories associated with depression, but three psychological explanations for the escalating rates of depression in women will be discussed, namely Levisohn's Behavioral Model, Seligman's Learned Helplessness Model and Beck's Cognitive Model.

The reason that these theories have been selected for review is that Gordon's Cognitive-Behavioral Intervention approach draws on the work of these three theorists. (Gordon, Sumner and McMichael, 1995). This study utilized Gordon's intervention, and it is therefore important to explore the work of these theorists.

#### **2.1.5.1 Lewinsohn's Behavioral Model**

Lewinsohn, Sullivan and Gross (1982) focused on depression resulting from individuals believing that they do not receive the positive reinforcement from society that they need. Davison and Neale (1982:237) described Lewinsohn's theory (1974) of depression as "the concept of reduction in reinforcement" due to inactivity and rejection.

In terms of this model, accustomed rewards are withdrawn from the person. Stuart and Laraia (1998) confirmed that the concept of society providing positive reinforcement is crucial to this model of depression. Positive interactions appear to strengthen individuals, whilst a minimal rate of rewarding interaction causes depression. The person may not provide the appropriate behavior to initiate positive reinforcement or the environment may fail to provide positive reinforcement. People distance themselves from the depressed persons, or the depressed persons avoid others, because of their deficiencies in social skills, to interact effectively. The absence of positive sexual experiences, rewarding social interactions, enjoyable outdoor activities, solitude and competency experiences, together with punishing events, marital discord, work problems and negative reactions from others are specifically related to the development of depression. (Stuart and Laraia, 1998).

This behavioral theory explained that the prevalence of depression in women might result from the lack of positive reinforcement given to women in society. (Gordon, Matwychuk, Sachs, Canedy, 1988).

#### **2.1.5.2 Seligman's Learned Helplessness Model**

Helplessness is an important concept in Seligman's 1975 model (in Daveson and Neale, 1982: 240).

Stuart and Laraia (1998: 357) when discussing the model, defined helplessness, as a "belief that no one will do anything to aid you".

Learned helplessness was viewed both as a “personality trait and a behavioral state”. Helplessness affects the person’s mood and ability to assert him or herself.

According to Davison and Neale (1982), who also wrote about the model, helplessness causes depression and produces feelings of low self-worth or low self-esteem. People become depressed when they believe desired outcomes are not attainable.

Maynard (1993a: 278) explained that Seligman’s theory (1975) proposed that depression resulted from a lack of control over important outcomes in a person’s life.

Passive and withdrawn behavior in depression is probably due to learned helplessness. Statements such as “It is my fault and things can’t change” are common to individuals who feel helpless. Expecting to fail is seen as part of their helplessness, leading to hopelessness, passivity and unassertiveness. The experiences of those susceptible to depression proved that either they did not allow for the development of coping responses against failure, were helpless to remove their sources of suffering or controlled too many reinforcers. (Stuart and Lararia, 1998: 357).

Helplessness is common to depressed women. Women have been given nurturing tasks through socialization, and have assumed the submissive and dependant role, whilst men have been allowed to be aggressive and independent. (Gordon, Matwychuk, Sachs and Canedy, 1988: 220). The submissive role in Indian women is discussed later in this chapter,

Section 2.1.4.

### **2.1.5.3 Beck’s Cognitive Model**

Beck’s Cognitive model stated that people experience depression because of their distorted way of thinking. Depressed people are dominated by pessimistic thoughts portraying themselves as inadequate, unworthy and negative. They make extreme judgments of themselves by viewing themselves as being dumb, ugly and unintelligent. (Stuart and Laraia, 1998).

According to Davison and Neale (1982), Beck's theory (1967) that depressed persons operated within the perspective of self-depreciation and self-blame. This theory explained that depressed individuals were victims of their own illogical beliefs and thinking. The feelings and thoughts of depressed patients are influenced by how they judge events, as these patients do not interpret their world as most other people would. They distort anything that happens in the direction of self-blame or the occurrence of a catastrophe. (Davison and Neale, 1982.)

According to Stuart and Laraia (1998), Beck's model proposes that the depressed person focuses on his personal deficiencies, which completely dominates his self-concept. He can only think of himself in a negative way, and by comparing himself with others, further lowers his self-esteem. Pessimism overgeneralizations of trivial events are common to the depressed person.

Gordon's Cognitive-Behavioral Intervention model in her facilitator's Manual (1988a) applied the teachings of the above three theorists in formulating the intervention for the depressed women. This aspect is discussed in Chapter Two, Section 2.3.3.4.5.

## **2.1.6 Self-esteem and gender in women**

This section reviews the relationship between self-esteem and depression, with particular emphasis on women.

### **2.1.6.1 Self-esteem**

Self-esteem refers to an individual's sense of his or value or worth, or the extent to which he "approves of, appreciates, prizes or likes himself or herself". Rosenberg describes self-esteem as a favorable attitude towards the self. A person with a favorable attitude towards himself or herself is regarded as having high self-esteem. Conversely, someone with an unfavorable attitude has low self-esteem. (Rosenberg, 1965).

High self-esteem was expressed as maintaining esteem, feeling worthy of a good life and good treatment by others. It included “competence, confidence, mastery, achievement, independence and freedom”. Social rejection and poor interpersonal skills were interpreted as non-acceptance of the individual, giving rise to low self-esteem. Low self-esteem also involves feelings of dissatisfaction, contempt and lack of self-respect so that the person views himself or herself as being lower in comparison to others. (Rosenberg, 1965).

#### **2.1.6.2 Depression in relation to self-esteem and women**

Depression causes changes in thinking, feeling, behavior and physical wellbeing. It has been shown that individuals with pessimistic thoughts, low self-esteem, a sense of loss control over life-events and worrying too much, appeared to be more prone to depression. These traits interfered with their coping abilities. It has been suggested that these traits may have been nurtured by the traditional upbringing of girls. Certain traditions for women in particular, such as their self-esteem and self-achievements were measured and reduced in value by the patriarchal family system. Too much attention was placed on their behavioral and failures, thereby predisposing them to a lowered self-esteem and to depressive symptoms. (Foley and Nechas 1993).

Erikson (1968 in Howcroft 1990) declared that individuals who experienced self-hate and low self-esteem were more prone to negative identities and self-images. Beck (1973) stated that low self-esteem was a characteristic feature of depression. According to Hume and Wynchank (2000), self-devaluation was especially common amongst women, who were dissatisfied with their body image and often resulted in eating disturbances. Walker (1994) stated that depressed women tended to view themselves as deficient, particularly in response to their age, youthfulness and personal attractiveness, in terms of cultural stereotyping. This resulted in perception in depressed women that they were inferior and inadequate.

According to Beck (1973), the symptom of deficiency has been reported by 81 % of severely depressed patients and 38 % of non-depressed patients.

Rosenberg (1965) explained that high incidence of depression in women was due to low self-esteem. Maynard (1993a) confirmed that their negative view of adjusting to ageing, of failure and accepting passive, dependant role lowered their self-esteem.

Women generally grew up with a sense of self-confidence and competence, which they could cope in most life situations. When difficulties in the family and society occurred, some women had low self-esteem and self-worth. They were of the opinion that they were not taken seriously by others that their contributions were not valued and their social and family roles were unimportant. Some women believed that their worth was measured according to their physical attractiveness and against the standards of models and actors. They would become very depressed due to their feelings of unattractive. (Walker, 1994).

Depression and low self-esteem was especially common among women with poor body images and eating disorders. Socialization and cultural stereotyping of the ideal women predisposed some women to resentment of themselves. (Dittrich, 2002).

## **2.2 Depression-definition, classification and diagnosis**

Depression as a clinical syndrome or psychiatric disorder has been described in a variety of ways. Reference is made of depression as a “sign, symptom, emotional state, reaction, disease or clinical entity”. (Stuart and Laraia, 1998).

McDowell and Newell (1996) described depression intensively as being:

- A **word** it refers to an affect, which is a subjective feeling tone experienced over a short duration of time
- A **mood**, which is sustained over a long period of time
- An **emotion**, involving feeling sad, helpless or demoralized; and
- A **disorder**, which has characteristics or clusters of symptoms.

For the purpose of this study, depression is not referred to as a symptom, but discussed as a depressive syndrome or illness, which is situated within the group of mood or affective disorders.

Only a brief overview of depression in terms of types, course, clinical features and diagnosis will be presented, as the focus in this study is to evaluate the effectiveness of group interventions in reducing levels of depression and improving self-esteem.

### **2.2.1 Definition of depression**

Depression, as indicated in the introduction to this literature review, refers to a sustained emotional state and not to an external expression of the individual's present emotional state. (Stuart and Laraia, 1998). The key symptom of depression is a depressed mood for most of the day or a marked disinterest in daily activities. (American Psychiatric Association, 1994).

### **2.2.2 Problems diagnosing depression**

There are a number of problems that can occur when making a diagnosis prior to planning treatment for a depressed patient. Kibel (1998) stated that the psychiatric interview is the tool, used to gather information from the patient or relatives to make a diagnosis of the patient. In multicultural setting in Southern Africa, it is important to be sensitive to language and cultural issues. The behavior of a patient should be screened for consistency within his or her cultural and spiritual background.

Firstly, knowledge of acceptable behavior and of cultural differences is required before a diagnosis of depression can be made. Behaviors acceptance in one culture as normal may be unacceptable in another. Signs and symptoms associated with psychiatric illness are dependent on social judgment. Therefore, decisions taken must be socially and culturally acceptable. (Katzenellenbogen, Joubert and Abdool Karim, 1997).

Another problem identified by Meys (1998) was that depressed patients were sometimes reluctant or omitted to inform the clinicians of their symptoms.

He therefore recommended that it was essential to assess the patient using a checklist of symptoms, to exclude or confirm the diagnosis. Specific details about the nature of the depressive illness should be obtained from relatives, friends or other who is in close contact with the patient. More time should be allocated for history taking and exploring the underlying emotional symptoms, so that misdiagnosis and mismanagement of depression could be prevented.

The Diagnostic and Statistical Manual of Mental Disorder (DSM IV) is an internationally recognized handbook, of diagnostic criteria, used by clinicians both overseas and in South Africa for the purpose of diagnosis, education and research into mental health problems. (American Psychiatric Association, 1994). It was developed in the United States of America, and is based on mental illness within the American population. Testing and cross-cultural research is being conducted to investigate the similarities in psychiatric problems and evaluate the applicability of the DSM IV handbook concerning the diagnosis of depression in South African patients. (Drennan, 1998b).

### **2.2.3 Classification and types of depression**

There are a number of different ways of classifying depression. Classification in psychiatry is based on the evaluation of symptoms, in terms of the duration of the symptoms, the nature and extent of the symptoms; the number and the severity of symptoms present. (Daubenton, (1998).

For the purposes of this study, a few classifications and types will be briefly described.

Forte (2000: 61) commented, “That there is no such thing as a typical depression presentation”. Terms such as endogenous and reactive depression have been replaced. Varied classifications, such as dysthymia, a typical depression, seasonal affective disorder and recurrent brief depression have been added. Classifications of the subtypes of depression according to Forte (2000: 61) are:



- “Mild, moderate or severe
- with or without biological features
- with or without delusions or hallucinations
- with or without manic episodes”.

“In clinical practice the presentation of depression is less clear cut”, than that, prescribed in the text. (McGillivray and Reid, 2001: 18).

McGillivray and Reid (2001: 18) stated that depression is divided into three main categories:

- “Major depressive disorder, one or more episodes of depression, with or without full recovery between episodes
- Dysthymic disorder, low grade, depressed mood for two years, without a full blown episode of major depression
- Residual types of depression, where the symptoms do not meet the diagnostic criteria for dysthymia or major depression”.

Uys and Middleton (1997) reported that the state of depression could be diagnosed by the degree of severity, number of episodes and rate of recovery. They referred to depression being:

- Mild, moderate or severe, with or without psychotic features
- partial or in full remission and
- single episodes, recurrent episode or relapse.

Angst (1990), described the classification of depression by the course pattern of the illness, using the DSM IV diagnostic criteria. Rapid changes or cycles in the disease pattern, from a single depressive episode to a recurrent episode, to major depression and finally to chronic depression, were taken into consideration.

#### **2.2.4 Clinical features essential for formulating a diagnosis of depression**

Clinicians use checklists, guidelines and their individual expertise to diagnose depression. Flexibility, openness and socially cultural acceptable decisions are important when assessing individual patients. (Kibel, 1998).

The signs and symptoms of minor and major depression, according to the DSM IV are termed diagnostic criteria in the DSM IV, and are used as checklist for formulating a diagnosis. The symptoms presented by the patient should have occurred nearly everyday, for at least two consecutive weeks. Five or more symptoms need to be present to make a diagnosis of major depression, and two to four for a minor depression diagnosis.

The criteria or symptoms include:

1. “Depressed mood
2. Markedly diminished interest or pleasure in usual activities
3. Significant weight gain or weight loss, or decrease or increase in appetite
4. Insomnia or hypersomnia nearly everyday
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feelings of worthlessness or inappropriate guilt
8. Recurrent thoughts of death or recurrent suicidal ideation”.

(American Psychiatric Association, 1994: 327).

The core signs and symptoms of depression were similar and overlapped, both in McGillivray and Reid (2001) and Forte’s (2000) checklists of symptoms, in comparison with the DSM IV criteria. In all three checklists, a minimum of two and a maximum of five or more symptoms, were required to fulfill the diagnosis of depression, for specific and non-specific categories or classes. (American Psychiatric Association, 1994; Forte, 2000; McGillivray and Reid, 2001).

When the three checklists or signs and symptoms were compared, appetite, sleep, poor concentration, agitation, depressed mood, low self-esteem, inappropriate guilt, decreased energy and suicidal thoughts were common. (American Psychiatric Association, 1994; Forte, 2000; McGillivray and Reid, 2001). In addition, Forte (2000) included loss of libido in his checklist.

McGillivray and Reid (2001) warned that a thorough medical and physical examination is necessary when screening patients for depression. Medical problems, such as anemia and endocrine dysfunction may present as mood-related disorders. Conversely, depression may mimic a somatic or medical problem. Co-existing medical problems should not be overlooked, especially in the elderly. ruling out the absence or presence of physical problems is essential, in the management and treatment of depressed patients.

### **2.3 The management of depression**

There are a number of different methods of managing depression. Therapies can include patient and family education; self-help efforts; cognitive therapy; family involvement; marital, interpersonal and behavior therapy; group work; and pharmacotherapy. (Berber, 1999, Shearer and Adams, 1993; Weissman, 1979). In some patients the treatment of choice may be biomedical, psychotherapeutic or a combination of treatments. (Schlebusch, 1987). Gordon, Matwychuk, Sachs and Canedy (1988) as well as Maynard (1993a) noted that psychosocial stressors had to be addressed as they impeded progress and functioning of depressed patients.

Hauenstein (1997) encourages depressed patient to comply with their treatment for rapid and effective recovery. They need to understand risk factors and signs of relapse associated with depression and if unsure seek medical help urgently. (Hauenstein, 1997).

Pharmacotherapy, group interventions and exercise will be discussed, as they are the methods that are relevant for this study.

### **2.3.1 Pre-requisites for assessment and planning the management of depression**

Berber (1999),Gagiano (2001), Forte (2000) as well as McGillivray and Reid (2001) stressed fairly similarly but individually, that the following aspects and information need to be considered when assessing and planning the depressed person's treatment regime or management, if it is to be effective:

- a complete report of the patient's
- history of past treatment and response to it
- family history of mental illness, past medical and psychiatric history
- psychological, social, cultural and environmental factors; and
- treatment approaches preferred by he individual patient.

Berber (1999) stressed that an accurate diagnosis is essential, prior to prescribing treatment.

### **2.3.2 Drug therapy: Antidepressants**

There are several types of antidepressant medication used to treat depressive disorders. According to Gibbon in the South African Medicines Formulary (2000) anti-depressants are a group of agents, with varying chemical structures, which elevate the mood of the depressed patient. Lader, (1997), stated that it was important to consider the side effects, efficiency, safety in regard to overdose and cost, when considering a choice in prescribing antidepressant medication. O'Toole and Johnson (1997) have suggested that it is essential for the advanced psychiatric nurse to be knowledgeable of physiological and pharmacological changes that occur with depression, in order to provide expert, efficient and cost-effective patient-centered care.

These aspects will be briefly addressed in this chapter, Section 2.3.2.1 to 2.3.2.5.

### **2.3.2.1 The use of antidepressants in relation to the different phases of depression**

According to Stuart and Laraia (1998) as well as Townsend (1996), the treatment prescribed must be individualized, according to the different phases that the patient is in, namely the acute, continued, maintenance or remission phases. It should also protect the patient against relapses of subsequent depressive episodes.

Berber (1999) indicated that the aim of the treatment should be to eradicate symptoms completely (complete remission). He noted that the process of recovery was full recovery and remission, relapse or chronic illness requiring acute or maintenance treatment.

Okasha (1998) confirmed that patients with residual symptoms and without full remission, needed to continue with antidepressant medication, as they were at risk of relapsing.

In some individuals, the depressive illness is reversible but their relapse rate is high, particularly in the elderly.

Long-term maintenance treatment was recommended for patients who had experienced either three or more episodes or two episodes of major depression together with one of the following histories:

1. Bipolar disorder or recurrent major depression
2. recurrence of depression after medication was discontinued
3. onset of depression before the age of 20; or
4. sudden, severe, life-threatening episodes within the past three years.

(Okasha, 1998).

McGillivray and Reid (2001) confirmed that antidepressant prescription might be needed for five years or more, in patients who had frequent recurrences or severe illness.

### **2.3.2.2 Response time and rates for antidepressant usage**

Berber (1999) explained that individuals differ in their response to medication use. There are some individuals, who notice an improvement after taking antidepressant medication within the first couple of weeks of commencing treatment. He further noted that antidepressants must be taken for at least 4 to 6 weeks for the full therapeutic effect to take place. (Berber 1999). Medications must be taken for 6 to 12 months after a single episode, to prevent a relapse. Recurrent depression may require longer treatment. There are differences in opinion on the response rate of patients to antidepressant treatment. It has been reported that about 50 % to 70 % of patients, improve adequately, irrespective of which antidepressant agent is used. (Lader, 1997; McGillivray and Reid, 2001). Berber (1999) commented that although there were new antidepressant medications, more than 20 % of patients were resistant to medication, and a further 20 % to 30 % only responded partially to drug treatment.

According to Gibbon in the South African Medicines Formulary (2000), the dose of the antidepressant medication must be gradually tapered off, prior to stopping treatment. Close monitoring of patients is required to ensure that the most effective dosage is used and side effects minimized. The newer antidepressants are safer in overdose and have “reduced cardio-toxic and ant cholinergic” effects. Patients must be educated on the potential side effects of antidepressant treatment to report promptly if in crisis. (Gibbon, 2000: 410).

### **2.3.2.3 Antidepressants in common use in South Africa**

According to Gibbon in the South African Medicines Formulary (2000), antidepressants are divided into different categories, namely the tricyclic antidepressants (TCA's) tetracyclic and related anti-depressants, selective serotonin re-uptake inhibitors (SSRI's), monoamine oxidize inhibitors (MAOI's) and Lithium.

The newer antidepressants used in South Africa, which are less sedating, less toxic and have fewer side-effects include: fluoxetine (Prozac), paroxetine (Aropax), meclobemide (Aurorix), lofepramine (Emdalen), mianserin (Lantanon), citalopram (Cipramil), sertraline (Zoloft), fluvoxmin (Luvox), venlafaxine (Efexor) and trazodone (Molipaxin). These antidepressants are expensive, and can be more easily obtained by patients on medical-aid and those who can afford to pay cash for treatment. (Gibbon 2000; Lader, 1997).

#### **2.3.2.4 Essential Drug Programme**

The Essential Drug Programme was implemented because of the high cost, lack of availability and inappropriate prescribing of medicine in the health system. In response to this, an Essential Drug List was developed to treat the commonly occurring health problems, including psychiatric problems, in South Africa. In addition, a set of guidelines was developed to assist nurses and doctors on how to best use the medicines that are available. (National Department of Health, 1998).

Amitriptyline (TCA), Imipramine (TCA) and Fluoxetine (SSRI) are antidepressants on the Essential Drug List, which are prescribed for depression. Roos, Joubert and Stein (1998) stated that in South Africa, except for limited stocks of Fluoxetine, the other selective serotonin reuptake inhibitors were not always easily available due to budget restraints. Therefore, the essential drugs from the list such as Amitriptyline and Imipramine were usually prescribed. Tricyclic antidepressants are more sedating and are still frequently used, whilst the selective serotonin reuptake inhibitors cause more gastro-intestinal upsets. (McGillivray and Reid 2001).

The following antidepressants are not on the Essential Drug List, Lofepramine, Clomipramine, Mianserin, Trazodone, Citalopram, Moclobemide, Tranclypramine, Venlafaxine and Nefazadone. (Baumann, 1998; Gibbon, 2000).

### **2.3.2.5 The effective prescription of antidepressant medication**

The principles of antidepressant drug treatment are similar, no matter which drug is used. (Lader, 1997).

Berber (1999: 2663) reviewed the “current strategies” and maximum benefits of antidepressant medication. He believed that “antidepressants will work only if prescribed correctly”. He described one effective way of approaching the treatment of depression, which was represented by the mnemonic OSCAR, indicating the five steps used to treat depression, namely, optimization, substitution, combination, augmentation and review.

Berber (1999: 2663 - 2668) explained that optimization is always the first step and this stresses that an antidepressant must be prescribed in the best possible way, in terms of length of time and the dose. Encouraging patients to comply with medication and educating them about their illness and medication is very important.

Substitution or “switching” is the method of replacing an ineffective drug with a new drug. (Berber, 1999: 2663). Substituting a new drug kept the treatment simple for the patient and avoided “drug-drug interactions” noted Berber. He found that there was more success with compliance to medication using immunotherapy indicating the use of a single drug. Combination is the ordering of two antidepressants from two different chemical classes, for example Tricyclic antidepressants, and Serotonin Reuptake Inhibitors. Berber explained that the therapeutic effect of two drugs was greater than one drug alone. However, he warned that great caution was needed by the medical practitioners, when choosing and ordering combinations. Augmentation is the addition of an agent, such as lithium, thyroid hormone, pindolol, busiprone or electro-convulsive therapy to “boost or magnify” the effects of the antidepressant. Some patients have been found to prefer these types of management.



When the four steps of the OSCAR have failed to improve the patient's symptoms, the patient must be reviewed and referred to a specialist. Referral must be made urgently if the patient becomes suicidal or psychotic. (Berber, 1999).

In conclusion, antidepressant treatment has been found to be effective in treating depression. However response rates, the period of medication prescribed and side effects are all aspects to be taken into consideration. Therefore, the type and choice of medication prescribed may differ for each patient. In addition, the cost and availability of the medications can be problematic.

### **2.3.3 Group therapies for the management of depression**

Therapies to assist with the management of depression may be conducted individually or in groups. For the purpose of this study, only group therapies will be considered because individual therapies were not utilized. Group therapy is prescribed for mild to moderate depression and not the severely depressed patients. See Section on Exclusion criteria Chapter Three, Section 3.6.3.2. Groups are an age-old phenomenon, starting as early as being in a family, a natural group. Stuart and Laraia (1998) define a group as a number of people, who relate, depend and share with each other to reach a common purpose or goal. Groups afford mutual support to members, are economical, cost-effective and conserve staff and time. Group therapy provides the patient with an opportunity for sharing, receiving support, reducing isolation and alienation, learning different approaches, and modeling beneficial behavior of others. (De Jager and Kirk, 1998).

Groups have multiple features such as being open or closed, formal or informal, in-patient or outpatient led or facilitated by a professional or a member of the community. (Kaplan and Sadock, 1998).

In this section, group therapies will be discussed under the following headings:

- Subtypes of groups
- Psychotherapy with groups
- Creative expression groups
- Support groups
- Group leaders
- Contexts of different groups
- Components of groups.

### **2.3.3.1 Subtypes of group therapies according to modality**

#### **2.3.3.1.1 Psychotherapy in groups**

Weissman (1979) described psychotherapy as a confiding relationship and a verbal dialogue between therapists and patient. It can be used on an individual or group basis. Stuart and Laraia (1998) described the goal of a psychotherapy group as helping and providing treatment for group member's emotional, cognitive or behavior problems. There are several approaches to psychotherapy. For the purpose of this study only group cognitive, group behavioral and cognitive-behavioral therapies will be discussed.

- **Group cognitive therapy**

Malcolm and Berard (2001) indicated that it was assumed that a person's thoughts influenced his feelings and behavior.

According to Townsend (1996), a depressed person is taught to control his negative thoughts and experiences by the use of group cognitive therapy. The depressed person generally has negative thoughts and expectations of his or her environment, self and future. The goals in cognitive therapy are to obtain relief of symptoms quickly, identify distorted thinking and behavior and help the person correct and change these distorted thoughts. (Townsend 1996).

Attempts are made to replace maladaptive thoughts with more adaptive ones and negative thinking to be replaced by positive thinking. Specific techniques in cognitive therapy are cognitive rehearsal, cognitive restructuring and graded task assignment. (Malcolm and Berard, 2001).

- **Group behavioral therapy**

According to Malcolm and Berard (2001) behavioral therapy includes a number of different methods of treatment. The assumption in behavior therapy is that maladaptive behaviors are learned responses to particular experiences. They included uncomfortable symptoms, distorted thoughts, unwanted feelings and behaviors. Behavior therapy is aimed at modifying the problematic behaviors in certain situations. (Malcolm and Berard, 2001).

Activity scheduling, graded exposure, behavioral experiments, relaxation training and social skills training are some of the techniques used in behavioral therapy. (Bothwell, 1998).

- **Cognitive behavioral therapy**

Cognitive behavioral therapy is a combination of cognitive therapy and behavioral therapy. It has been found to be effective in treating depression. This therapy is brief, problem focused, simple and practical. Primary health care workers may manage anxiety and mood disorders effectively using cognitive-behavioral therapy. (Bothwell, 1998).

It aims to improve symptoms, coping skills, self-esteem and general functioning and prevent relapse in patients with specific mental illness. The cognitive model stresses that negative and self-critical thoughts maintain the depressive behavior in patients. Therefore, cognitive-behavioral therapy is directed at modifying these thoughts and behaviors. (Maynard, 1993a).

Gordon designed, developed and researched the Cognitive-Behavioral Therapy Intervention Model (1981) for use as a group intervention strategy for depressed women. This model was based on the theories of Lewinsohn, Seligman and Beck as discussed in Chapter Two, Section 2.1.5. It is a comprehensive, structured group therapy model. (Maynard, 1993a).

This model allows for flexibility in the number of group sessions required. Gordon provides clear, step-by-step instructions for facilitators in planning and implementing the cognitive behavior group intervention sessions using her Facilitator's Manual (1988a) and Women's Workbook (1988b). These instructions are outlined in Appendix 16. Gordon's cognitive-Behavioral Group Intervention Model (1988a, 1988 b) consists of 20 group sessions: the purpose of women's groups with regard to feelings and depression; goal setting; cognition and feelings; building self-esteem; reflection; relationship to self; relationships, understanding our family of origin; relationship to others; reflection; loss; grief; termination; communication and networking; assertiveness skills; conflict management ; stress and crisis; relaxation; exercise; body image; nutrition; sexuality; termination and closure. The group sessions used in this study are discussed in Chapter Three, Section 3.9.1.3.

Gordon and Maynard conducted many studies in 1988 and 1993 respectively, using this group intervention model, with good results. Three pilot studies conducted by Gordon (1998a) in Minnesota and London, showed less depression and a higher self-esteem amongst the women who attended the group sessions. Maynard's study (1993a) using Gordon's group intervention also showed a significant reduction in depressive levels and a significant increase in the self-esteem scores. Depression causes changes in self-esteem, creating pessimism and a lowered self-esteem. (Self-esteem and its link to depression are discussed in Chapter Two, Section 2.1.6).

Sumner (1995 in Gordon, Sumner and McMichael, 1995) a psychotherapist and marriage and family therapist, has facilitated more than 70 groups of depressed women, using Gordon's Cognitive-Behavioral group intervention sessions. She found that the women's marriages had improved, their productivity at work increased and they were more patient with their children.

Gordon, Matwychuk, Sachs and Canedy (1988) conducted a study in which members were evaluated before and after cognitive-behavioral therapy intervention, and followed up three years later. The follow up was to assess these same group members, to determine whether the effects of the group interventions were lasting. The results of this study were both lasting and positive. Some of the positive results were reportedly therapeutic group support and interaction; the women became their own psychotherapist, a significant reduction in depression and helplessness and an increase in self-esteem levels. (Gordon, Matwychuk, Sachs and Canedy, 1988).

- **Creative activity groups**

Everyday leisure or work activities can provide meaning and purpose for individuals. Inactivity, lack of drive and apathy are common symptoms of depression. Activity therapies are important in giving a refreshing meaning to life, making a person more alert, improving health. (Evans, 2002). They involve creative participation and encouragement of individual choices. The choices made by members included whether or not to attend programmes, voicing their opinions at discussions and preferences of colors or crafts during work activities. In addition, they offered the patient opportunities to become involved and purposeful in their own treatment. (Bartho, Flynn and Sparks, 2000).

Van Greunen (1997) described the aims and principles of using activity therapy in treating patients with mood disorders, including depression. She stressed that activities should be graded according to the recovery rate of that particular patient. Long-term aims of the activity therapy should be to stimulate enjoyment and the expression of positive emotions. Initially the activities should not be limited by time. Concrete activities should be tried first. The activities assigned to the depressed patient should guarantee success so that the feeling of achievement in the activity results in an improvement of the patient's mood.

The following precautions need to be adhered to when planning these activities:

1. The activities should have a step-by-step instruction with repetition
2. clear, logical and short instructions must be accompanied by demonstration of the specific activity
3. one activity to be presented at a time to the patient
4. sufficient time should be allocated to the patient to complete the activity at his or her own pace; and
5. help should only be offered when needed.

Initially the person supervising or leading the activity needs to indicate that, she or he will share responsibility with the patient. (van Greunen, 1997).

Brooking (1992) describes the use of creative activities, which were therapeutic activities used by psychiatric patients. Creative activities such as hobbies, craftwork, art, music, drama, day and weekend trips, parties, concerts, poetry, story writing, relaxation, horticulture, exercise and dance therapy were shown to give patients a great sense of achievement. The range of craft activities depends on the expertise of the supervisor. It can include leatherwork, jewelry making, toy making, weaving, basketwork, woodwork, pottery, knitting and sewing. Patients were able to keep the products of crafts groups on completion. Manual dexterity and concentration were enhanced during these activities. Social interaction and social skills improve during creative activity group work. (Brooking 1992).

- **Support groups**

A support group is described as a group of responsible people, who assist vulnerable persons in meeting their needs and exploring their potential within the community. Professionals, group members or volunteers, may run support groups. (Makhale and Uys, 1997).

Support groups are a very important rehabilitation resource for mentally ill patients.

Support groups are a universal system, which may be used in any aspects of life, both for the mentally ill and for the mentally healthy. (Stuart and Laraia, 1998). This is supported by De Jager and Kirk (1998) who stated that support groups are a valuable resources and are relevant to and significant for people for people who are distressed or in demanding situations.

Stuart and Laraia (1998) describe support groups as self-help groups. These groups consist of members who have experienced similar problems and may or may not receive consultation from a health care worker. Similarly, Uys and Middleton (1997) stated that groups are established by professionals and may be run by members, or by leaders who evolve from within the group. Support groups consist of groups for families, patients or both. They are extremely effective in assisting patient care. These individuals according to Uys and Middleton (1997), are known as consumers. Consumers are equals in the partnership with the health workers in psychiatric care and rehabilitation. (Uys and Middleton, 1997).

In an exploratory study Makhale and Uys (1997), analysed support groups for the mentally ill as a psychiatric intervention in South Africa in 1997. They found that support groups in Gauteng, Free State, Eastern Cape, Western Cape and Kwazulu Natal provinces were not equally distributed. Fourteen support groups were identified, five for depression one for obsessive compulsive disorder, one for bipolar disorder, one for persons with general psychiatric disorders and six mixed groups for either the parents, careers and or friends of persons with bipolar disorder, Alzheimer's disease and schizophrenia. These groups were involved in crisis intervention, teaching of life skills, organizing parties and visits, support, assisting with advocacy, inviting speakers and holding workshops. These groups were insufficient to reach the large numbers of mentally ill persons living in communities throughout the Republic of South Africa. Participation by professionals was inadequate.

It appeared that professionals including nurses lacked the understanding of the value of support groups. (Makhale and Uys, 1997).

The Depression and Anxiety Group of South Africa is a non-profit organization, which was started in 1995, but only included depressed patients in 1998. It has its headquarters in Sandton, Gauteng, which is staffed by trained professionals to assist with telephone counseling. This organization has 170 support groups, 40 of which are in the rural areas. There are also many regional co-ordinators of support groups for depressed patients, led by sufferers of depression. The function of the Depression and Anxiety Group are education of patients, public and professionals; fostering self-help for patients and families; reducing stigma and discrimination; improving access to care: and to eliminate these illnesses through research. (Depression and Anxiety Group, undated). The Medical Research Council's Research Unit on Anxiety and Stress Disorders at the University of Stellenbosch, Cape Town, reviews booklets and information produced on depression and anxiety for use by support groups and the public. (Depression and Anxiety Support Group, 1998).

#### **2.3.3.2 Aspects relating to the functioning of groups**

Certain aspects for the successful functioning of the group must be considered in the planning phase of the group. Certain items will differ such as the size of the group, length of sessions, rules and roles.

According to Stuart and Laraia (1998) the preferred group size is seven to ten members, to allow members the opportunity to express their viewpoints. The length of sessions for lower functioning groups is 20 to 40 minutes, and one to one and a half hours for higher functioning groups. The frequency of the group sessions can vary, but tend to be either weekly or fortnightly. Patients must be screened prior to joining the group. Suitability as a group member may include similar sex, diagnosis, problem, ages and interests. (Kaplan and Sadock, 1998).



Norms or rules are essential in every group and relate to issues such as attendance, punctuality and conflicts. The group leader in conjunction usually plans the rules set out for each group with the group members.

Yalom's (1989 cited in Stuart and Laraia, 1998) curative factors or positive factors are forces that occur in groups. The leader should make the group members make maximum use of these factors during the group process. The curative factors are imparting information; instilling of hope; universality; altruism; development of social interaction; catharsis and group cohesion. (Stuart and Laraia, 1998).

### **2.3.3.3 The role of the person running the group**

#### **2.3.3.3.1 The role of the facilitators**

A facilitator's role can be assumed by any member of the multidisciplinary team depending on his or her expertise and preferences. The major role of the groups facilitator is to promote mutual interaction and support within the group, while attending to each member's experiences and problems. Creation, maintenance and communication of empathy, encouragement, explanation, guidance and practical support between the group members are also the responsibility of the facilitator. Facilitators need to be reliable, assume the role of timekeeper and set limits as needed. (De Jager and Kirk, 1998).

Gordon (1998a) stressed in her Facilitator's Manual that facilitators neither expected to nor were capable of changing the group members, but that the members could change, by being aware of themselves, accepting their lives and being more assertive. According to Gordon, the facilitators had to have the following qualities: They had to be professional, be role models, have warmth, genuine concern, empathy, listen, trust, set up an agenda with specific topics, and explore problems with the group members, summarized and check understanding using feedback. (Gordon 1988a).

#### **2.3.3.3.2 The role of the Volunteer**

Kreuger and King (1998) defined a volunteer, as an individual who is willing to offer time, talent and energy to accomplish a task or to assist with research studies. Volunteers are ordinary persons, colleagues, students, senior citizens, teenagers, elected officials and a host of other people.

Groups run by volunteers are very important as a back-up support system for health workers. Sugden, Bessant, Eastland and Field (1986) explained that the work of volunteers in mental health originated from hospital visitors and friends. There was reciprocal giving and taking, whereby the community became both the provider and recipient of health services. (Sugden, et al, 1986).

Volunteers are generally very helpful and can assist a trained professional with groups for mental ill-health problems. Aber (1997), an occupational therapist discussed the benefits of volunteer programmes in specific areas of mental health. The volunteer is extremely helpful with sporting events, teaching of hobbies, assisting as tour guides, preparation of concerts, craft making, baking, shopping and providing of transport. The volunteer provides mainly guidance and teaching of a skill in making arts and crafts. (Aber, 1997).

#### **2.3.3.4 Description of group therapies that have been successful with depressed patients in different contexts**

##### **2.3.3.4.1 A psychiatric out-patient support group in a rural area**

In Bushbuckridge, a rural area in South Africa, mental health workers are scarce. Psychology graduates and nurses facilitated this support group called Sizani ("Help one another") in a community house. The purpose of this group was to assess whether attendance at this club for group meetings had any impact on the frequency of hospitalizations. There were insufficient beds for psychiatric patients in the hospital.

Members of the group had diagnoses of schizophrenia, epilepsy, depression, psychosis, bipolar disorder and panic attack. The purpose of this group was directed towards improving interpersonal relationships, learning new coping skills and changing maladaptive behaviors. Members were involved in socializing, singing, praying and cultivating crops. The cultivation of crops was an income-generating project. However, these activities, patients became more knowledgeable whilst still in hospital. Group discussions about issues, such as the purpose of treatment and importance of compliance, together with the planned activities assisted in reducing the number of hospitalized patients. Prior to joining the support group, patients from the group diagnosed with unipolar depression were admitted four times and those with bipolar depression twice respectively. After 32 weeks of the support group, the patients with unipolar depression and bipolar depression did not require further hospitalization. (Lustig, Malomane and Tollman, 1997).

#### **2.3.3.4.2 Group cognitive therapy for depressed elderly patients**

In a study done by Zerhusen, Boyle and Wilson (1991) many elderly persons who lived in nursing homes were found to be isolated from their families, were depressed, bitter and discouraged. Depression in the elderly is often overlooked as a normal aspect of the ageing process. Most elderly generally experiences loss of physical and mental health, family, friends, spouse, home and income. In view of this, a study was implemented, to assess the effectiveness of nursing home personnel as group leaders, using cognitive therapy in Miamisburg, Ohio. The group leaders were two nurses and one social worker, who received training for 10 weeks on cognitive therapy prior to the group sessions. All 60 patients were screened using the Beck Depression Inventory (BDI). The treatment group received cognitive therapy, the second group received music therapy by a trained professionals and the third group received normal nursing care from the nursing staff.

The cognitive therapy group that received 10 weeks of cognitive therapy was subdivided further into three smaller groups, each with a different leader.

The findings of this study were positive in respect of the cognitive therapy group. The independent professional judges and residents that the group leader performed satisfactorily. There was good attendance at group sessions and the residents requested further sessions. There were significant changes clinically observable in the patient's mental and physical status and in the BDI levels after the group sessions. Less significant changes were noted in the music and control groups. Cognitive group therapy was found to be effective in the elderly. (Zerhusen, Boyle and Wilson, 1991).

#### **2.3.3.4.3 Group therapy with chronically depressed geriatric patients**

Clark and Vorst (1994) conducted this study on chronically depressed geriatric patient's in a hospital setting in Catawba, Virginia. At the screening interview the chronically depressed geriatric patient's ability to participate in a group was assessed. Many of the patients in this hospital had not experienced group therapy before. The physician and the case manager were included at the screening session to obtain the patient's co-operation and to explain the benefits of group therapy to the patients. The group approach was less structured, non-demanding and open-ended. The group sessions were held twice weekly in the mornings, as the mornings were suitable for the elderly patients. The group process was divided into the integration (1<sup>st</sup>), problem solving (2<sup>nd</sup>) and the termination (3<sup>rd</sup>) phases. During the first phase, comfort, cohesion and socialization were important for successful integration. (Clark and Vorst, 1994).

The benefits of the multi-modal treatment, using antidepressant medication, relaxation, exercise, sleep, hygiene and the need for activity were introduced during this phase. The patients were also expected to identify personal recourses in them useful for coping with depression.

Each patient had to take care of the responsibility to identify their personal resources in coping with depression, before they could enter the problem-solving phase. Clark and Vorst noted that chronically depressed geriatric patients found self-inception very threatening. Instead of identifying personal recourses such as self-awareness and positive thinking, they preferred to choose relief through the use of medication or dependency on the efforts of other members. Major modifications were made to the contents of the interpersonal and cognitive behavior therapies prior to its implementation, to be appropriate and suitable for these patients. These included limiting the number of group sessions, using an open-ended format and making allowances for complications such as dementia, psychosis and severe apathy that may occur when considering group therapy for these chronically depressed geriatric patients. Group reminiscence tasks were used to encourage patients to recall experiences that related to their current depressive feeling. The recollection of these events revealed some or no cognitive distortions. The group leader had to be consistent, sensitive and flexible in dealing with these cognitive errors and in giving feedback.

The group member's progress was evaluated by their responses and interaction during the group sessions and measured by a mental state examination conducted by the team psychologist. The last two sessions were used for preparation for discharge. The termination of group members due to discharge created feelings of loss amongst the members; they were however assisted towards healthy termination. At this stage they were also encouraged to discuss their goals and plans after discharge, should the depressive symptoms recur. Group therapy using specific modifications with integration into their overall treatment programme was found to be effective in treating chronically depressed geriatric patients. (Clark and Vorst, 1994).

#### **2.3.3.4.4. A psycho-educational group approach for depressed women.**

The psycho-educational approach by nurses has primarily focused on patients with schizophrenia. However, considering that depression in comparison to schizophrenia is a major mental health problem, the structured, psycho-educational approach has subsequently been applied to depression as well. Psycho-education has been reported to increase feelings of independence and self-confidence in women who require outpatient support after being hospitalized with a diagnosis of depression. (Maynard, 1993b).

According to Maynard (1993b), the psycho-educational format provided a comprehensive treatment approach in developing knowledge and skills to cope with the stresses of women in society. Maynard described the small group format, which used the socio-process model in psycho-education in America. Formatting of relationships amongst members, learning and examining attitudes, values, and belief were needed to change or modify behavior. Learning from and providing feedback to one another was important when using this group format. The objectives of this group were to stress to the women the need to identify thoughts and replace them with positive ones; to learn about goal setting, assertiveness and coping skills; to learn the role of personal health in depression and methods of increasing self-esteem. This model was designed for eight to ten members attending 10 weekly sessions. However, Maynard (1993b) noted that the number of sessions could be increased or decreased based on the women's abilities and needs. Assessment tools were administered before a new skill was taught.

Homework exercises were important for knowledge and skill development, and could take the form of readings, completion of self-assessment tools or practice of new skills. Short and clear instructions should be given for homework assignments.

Scale for depression, anxiety or self-esteem, hopelessness or a self-appraisal report were used to evaluate the success of the group. Maynard (1993 b) noted that psychiatric nurses were ideal to implement this framework to manage the life-events and role demands of women with depression. This is important since depression is a multidimensional process, associated with multiple problems, faced by depressed women. (Maynard, 1993b).

#### **2.3.3.4.4 Gordon's cognitive-behavioral therapy**

As stated in Section 2.3.3.1, Verona Gordon designed, developed and researched the cognitive-behavior therapy intervention model for depressed women. This model was used as a group intervention for depressed women and can be facilitated by nurses.

In the study by Gordon, Matwychuk, Sachs and Canedy (1988), 20 depressed women were randomly selected from 81 potential participants, who responded to the London radio broadcast to participate in this project. The women were screened and the Beck Depression Inventory, the Coopersmith Self-esteem Inventory, the Beck Hopelessness Scale and the Young Loneliness Scale were administered. The participants were randomly assigned to two groups; one group was the no treatment group and the other the treatment group. Members of the treatment group attended 14 weekly group sessions facilitated by two nurses, trained and experienced in behavioral and cognitive therapy. The group met for two hours each. The first hour consisted of lectures and discussions; the second hour was spent discussing issues that emerged at that specific sessions. Each woman in the treatment group was given a Women's Workbook and was expected to complete homework as requested. Beck's cognitive theory, Seligman's learned helplessness theory and Lewinsohn's positive reinforcement theory helped the women gain insight and skills to overcome their depressive symptoms. After 14 weeks and 36 weeks, the measuring instruments were re-administered to all 20 women.

The results showed that group treatment was of therapeutic value for depression. There was a significant reduction in depression and helplessness and an increase in self-esteem levels in the women who attended the group sessions. There was no significant change in the control group. The improvements noted in the treatment group were maintained over the three-year follow up periods. The success of this group intervention were attributed to the Women's Workbook which was designed to meet the concerns of the depressed women; strength building and communication skills were tested and developed in a safe environment; the structured group sessions together with the workbook encouraged the women to be their own psycho-therapists; and the supportive and strong bonds between the group members motivated them, created stability and change within themselves. (Gordon, Matwychuk, Sachs and Canedy, 1988).

## **2.4 Exercise**

Exercise is advocated as a form of treatment for depression as it has both psychological and physiological effects. There has been no evidence that any one type of exercise is better for depressed patients. (Artal and Sherman, 1998). Moderate exercise such as walking, jogging, running and weight lifting have all been noted to reduce these stress response.

(Le Grange, 1993). However, exercise as a form of treatment, needs to be individualized and tailored according to the patient's needs for reasons explained hereafter. (Artal and Sherman, 1998). Exercise should be prescribed only after careful consideration of the circumstances of each patient. The patient should start gentle, and the intensity, frequency and duration of exercise should be planned and monitored. (Le Grange, 1993).

According to Artal and Sherman (1998), several precautions and considerations apply when prescribing exercise to depressed patients:



1. Anticipate barriers such as fatigue, lack of energy, psychomotor-retardation, hopelessness and worthlessness, as they may interfere with motivation to exercise
2. keep expectations realistic, as depressed patients tend to self-blame and view exercise as another occasion for failure
3. some patients may prefer exercise to avoid medication and psychotherapy, to escape the stigma and shame surrounding the illness
4. a feasible, flexible, practical, realistic and pleasurable exercise programme may be added to the patient's treatment; and
5. the exercise chosen should be of the patient's preference, guided by the individual's background and medical history prior to it being added to the patient's schedule.

Although, there are very few adverse effects or disadvantages of moderate exercise, unaccustomed exercise and exercising to excess has some risks. Persons who have been sedentary need to start with a mild exercise schedule such as walking for a few minutes everyday. With treatment and as the symptoms improve, after two to three weeks the walking becomes easier. It has been suggested that exercise, be delayed for patients who are severely depressed, and instead a programme of medication and psychotherapy to be used, whilst the symptoms are being alleviated. (Artal and Sherman, 1998).

Some overweight persons have a disturbed body image, whilst compulsive persons may become addicted to that they have loss of control over their lives and exercise allows them to regain control to some extent.

Fifty-one studies reported by Spence, Poon and Dyck (1997 in Artal and Sherman, 1998) linked exercise to a small but significant increase in the individual's self-esteem. Le Grange (1993) also postulated that physical activity could lead to enhanced self-esteem.

He suggested that a decrease in depression after a programme of exercise is related to improved self-image and self-esteem. An improvement in health, physical; weight and flexibility have been shown to enhance a depressed person's mood. Large muscle activities have been shown to assist in discharging pent-up feelings, anger, frustration and hostility. (Artal and Sherman, 1998).

A 10 week program of weight training done by Singh, Celements and Fiatarone (1997 in Artal and Sherman, 1998) demonstrated significantly improved sleep patterns and reduced depression levels amongst patients with major depression or dysthymia.

Changes in biochemical activity and increased levels of neurotransmitters during and after exercise may affect the central nervous system. Strenuous or consistent and continuous periods of exercise appears to cause an increase in the plasma levels of endorphins and nor epinephrine, which elevate mood through their antidepressant action. Nor epinephrine levels are stated to increase by 400 % after exercise. (Le Grange, 1993) and Chaouloff (1997 in Artal and Sherman, 1998) reported that vigorous exercise increased serotonin levels in the brain. He noted that beta-endorphins, which are endogenous chemicals found to reduce pain and induce euphoria, have been linked to "high" experienced by runners and intensive exercisers.

A positive relationship has been found between exercise and subjective wellbeing. Exercise was found to increase a depressed person's physical activity, by improving the energy levels and stamina for coping with everyday tasks (Le Grange, 1993). Exercise also has been shown to be a therapeutic distraction, diverting the depressed person's concern from worry and guilt. (Artal and Sherman, 1998).

In a study of depressed patients conducted by Matinsen and Medhus (1989 in Artal and Sherman, 1998) the experimental group were randomly assigned to eight weeks of walking and jogging, the control group to either recreational therapy or no therapy.

The outcome was a significant reduction in the depression scores in only the walking and jogging group. In another similar study by Doyne, Ossip-Klein and Bowman (1987) in Artal and Sherman (1998) using jogging and walking, the mood and fitness of the depressed patients improved. (Conroy 1982 in Le Grange, 1993) conducted a study on hospitalized patient with clinical depression. The experimental group participated in an exercise programme, whilst the control group did not participate in this programme. The exercise group showed an improvement in their Beck Depression Inventory Scores, reflecting the antidepressant effects of exercise.

A study was undertaken using three treatment programmes on 150 volunteers, who were at least 50 years old and depressed. The program included working out on a treadmill or a stationary bicycle, using antidepressant medication or a combination of both. At the end of four months, all three groups showed a significant reduction in depression rates. At the end of six months, the exercise group experienced lower relapse rates than the other two groups. (Blumenthal, 2000).

In conclusion Le Grange, (1993) confirmed that the effects of exercise on the management of human behavior and depression, short and long term, were both consistent and positive. Exercise can be a helpful treatment in addition to antidepressant or psychotherapy.

Le Grange, (1993), Plante, (1996) and Todd, (1997), all agreed that exercise as a treatment was highly recommended in a changing society, where short-term and self-help treatment strategies were essential. Exercise can reduce depression levels, and as depression decreased exercise, levels increased correspondingly.

## **2.5 CONCLUSION**

Depression is a major problem in South African and internationally amongst women. Socialization, multiple roles, culture and tradition together with stressful life experiences have been reported to lead to helplessness, pessimism and low self-esteem in women.

Many clients are non-compliant in taking antidepressants, whilst antidepressants alone are only effective in 65 % to 75 % of depressed clients. (Isaacs, 1998). There is therefore a need for cost-effective, nurse-facilitated non-pharmaco-therapeutic modalities of treatment, in addition to antidepressant medication. Group therapies as a form of information, education and purposeful activities have been shown to be beneficial, as intervention or rehabilitation programmes for depressed patients. Furthermore, exercise has been found to be a mood-lifter for depressed patients by increasing endorphin and nor epinephrine levels. (Le Grange, 1993).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The purpose of this chapter is to describe and justify the research methods used to fulfill the objectives of the study. This includes discussions of the research design, target population, sampling strategy, evaluation instrumental, data analysis and ethical issues.

#### **3.2 Research design**

The study design was a quasi-experimental, non-equivalent control group design, suing an independent group of subjects for each of the three group studied. (LoBiondo-Wood and Haber, 1998). A pre-test and two sequential Post-tests were undertaken.

In this study, a comparison was made of the Beck Depression Inventory scores and the Rosenberg Self-Esteem scores, which were used to test the cause and effect relationship between the specific group interventions (independent variables) and standard treatment incorporating the use of antidepressant medication (dependent variable). The control group acted as a base line for the comparisons (Rudestam and Newton, 1992). This study used quantitative methods in the research design, represented though the evaluation of the numeric data in terms of the level of depression and the level of self-esteem.

Full experimental control was not possible with this design, for ethical and practical reasons. The characteristics of a true experiment were lacking, because the sample could not be randomly selected. (Lo-Biondo and Harber, 1998).

#### **3.3 Hypotheses**

Statements about the relationships between variables that the researcher expected to find because of the study are defined as hypotheses (Polit and Hungler, 1997) the following were hypotheses that this study aimed to test.

### **3.3.1 Hypothesis 1**

It was hypothesized that a Nurse-facilitated cognitive group intervention as an adjunct to antidepressant medication and standard treatment would enhance the levels of self-esteem in mild to moderate depressed Indian women.

### **3.3.2 Null hypothesis 1**

The null hypothesis stated that the Nurse-facilitated cognitive group intervention as an adjunct to antidepressant medication and standard treatment would have no effect on reducing the levels of depression and enhancing the levels of self-esteem in mild to moderately depressed Indian women.

### **3.3.3 Hypothesis 2**

It was hypothesized that a Volunteer-led crafts group intervention as an adjunct to antidepressant medication and standard treatment would have a positive effect on the levels of depression and would enhance the levels of self-esteem in mild to moderately depressed Indian women.

### **3.3.4 Null Hypothesis 2**

The null hypothesis stated that the Volunteer-led crafts group intervention, as an adjunct to antidepressant medication and standard treatment would have no effect on reducing the levels of depression and would enhance the levels of self-esteem in mild to moderately depressed Indian women.

### **3.3.5 Hypothesis 3**

It was hypothesized that the standard treatment Control group would have a positive effect on reducing the levels of depression and would enhance the levels of self-esteem in mild to moderately depressed Indian women.

### **3.3.6 Null hypothesis 3**

The null hypothesis stated that the standard treatment Control group would have no effect on reducing the levels of depression and enhancing the levels of self-esteem on mild to moderately depressed Indian women.

### **3.3.7 Hypothesis 4**

It was hypothesized that the Nurse-facilitated cognitive group intervention and the Volunteer-led crafts group intervention in comparison to the standard treatment Control group would have a positive effect on reducing the levels of depression and enhancing the levels of self-esteem in mild to moderately depressed Indian women.

### **3.3.8 Null hypothesis 4**

The null hypothesis stated that the Nurse-facilitated cognitive group intervention and the Volunteer-led crafts group intervention in comparison to the standard treatment Control group would have no effect on reducing the levels of depression and enhancing the levels of self-esteem in mild to moderately depressed Indian women.

### **3.3.9 Hypothesis for Objective 5 and 6**

Hypothesis for Objective 5 and 6 were not set up because the type of assessment was not appropriate for inferential statistical analysis. Objective 5 was to describe the occurrence, type and perceived impact of Life-events prior to and during the study amongst mild to moderately depressed Indian women in the three groups respectively. Objective 6 was to assess whether there was a change in the perceived levels of exercise that could have influenced the levels of depression in mild to moderately depressed Indian women in the three groups respectively.

### **3.4 Study setting**

The study setting is a community psychiatric clinic, serviced by the KwaZulu-Natal Provincial Health Services, for clients residing in the Chatsworth and Shall cross areas of the Durban Metropolitan Region.

### **3.5 The study population**

In this study, the study population constituted depressed Indian women. At the time of initiating the study there were only Indian clients attending this specific clinic, currently women of all races are attending this clinic. The target population refers to the entire population that the researcher was interested in. The accessible population refers to the participants that are eligible as subjects in the study. (Polit and Hungler, 1997). The accessible population consisted of Indian women who were already diagnosed with depression, were currently on antidepressant medication for a continuous period of three months or more, provided by the selected community psychiatric clinic, at the time of the study. The researcher was able to ascertain from clinics records, that there were 117 women who were received antidepressant medication from the clinic.

### **3.6 Sampling strategy**

#### **3.6.1 Method of sampling**

The total accessible population was 117 women. However, as the inclusion and exclusion criteria specified the level of depression as measured by the Beck Depression Inventory Scale, each of these participants would have to be tested in order to use a probability sampling method. As this was impractical, a convenience sampling procedure was used. This was advantageous in terms of costs, geographical location and time restraints.



### **3.6.2 Sample size**

A sample size of 45 consenting participants was selected and they were randomly allocated to the three groups. Therefore, there were 15 participant in each group. This represents 39 % of the sample. This number of participants was determined on the basis of the recommendation by Kaplan and Sadock (1998), that the optimal size in a group ranges from a minimum of 15 members. The total sample size of 45 was large enough to allow for limited attrition, voluntary withdrawal, persistent non-attendance, illness and crises. In fact, the sample of 45 was retrained for the study.

### **3.6.3 Sample selection criteria**

The inclusion and the exclusion criteria are discussed below:

#### **3.6.3.1 Inclusion criteria for the sample**

The women had to fulfill the inclusion criteria, in order to be included in the study:

1. They needed to speak and understand English, as the instruments were written in English and the groups were run in English
2. They had to be Indian women
3. They had to live either in the Shall cross or Chatsworth areas, which were the catchment areas of the clinic and representative of similar home environments
4. They had to be between 25 and 65 years of age, so that teenagers or young adults did not unduly influence the group in their more advanced years
5. They had to be diagnosed as either clinically depressed, by clinical features or by a DSM IV (1994) diagnosis, by a Medical Officer or a Psychiatrist employed at the clinic participating in the study
6. They had to have a Beck Depression Inventory score of more than nine and less than 29, indicating mild to moderate depression. (McDowell and Newell, 1996)

7. They had to have been on antidepressant medication for three months or more and the medication had to have been prescribed at the clinic by the Psychiatrist or the Medical Officer
8. They were required to continue with the normal or usual standard treatment. This entailed being checked by a nurse on a monthly basis or by a doctor, in the event of problems arising and or a script needing to be reviewed and the receipt of antidepressant medication from the clinic pharmacy
9. They had to be on the records of the clinic register, to confirm their continuous attendance at this clinic
10. They needed to be committed and prepared to attend all group sessions
11. They needed to have no items as outlined in the exclusion criteria
12. They needed to give informed consent to participate in the study.

### **3.6.3.2 Exclusion criteria for the target population**

If any of the following exclusion criteria were present in the potential participants, they were excluded from the sample.

- 1) They could not be acutely physically ill, as this would not have been conducive for their participation in the planned group activities
- 2) They could not be mentally retarded, as this could have created problems in understanding and participation in the group sessions
- 3) They could not be psychotic or acutely depressed, could not present with symptoms of inattentiveness, poor concentration, irrational and disruptive behavior, as this could have created conflicts, misunderstandings and disturbances during the group process

- 4) The participants could not be on antidepressant medication for less than three consecutive months. Three months was the minimum optimum time for an antidepressant to take effect. See Chapter Two, Section 2.3.2.2
- 5) The participants could not have a history of interrupted or defaulting clinic attendance or termination of antidepressant medication
- 6) The participants should not currently have major social problems, including homelessness, in the process of a divorce or following the death of a spouse, as these events could have created further depression
- 7) Participants, who had Beck Depression Inventory scores of less than nine, which represents “no depression”, were excluded
- 8) Participants who had Beck Depression Inventory (BDI) scores of more than twenty-nine, which represents “severe depression”, were excluded and referred to a Psychiatrist or psychiatric trained Medical Officer, for further management
- 9) Non-attendance of two or more group sessions in either the Experimental group 1, Experimental group 2 or the Control group could have seriously the Post-test scores, and meant exclusion of the participant from the study.

#### **3.6.4 Recruiting and selecting the sample**

A poster was made six (6) weeks prior to the study, informing depressed patients attending the clinic about the proposed study and its purpose. The poster was placed strategically on the notice board in the clinic’s waiting area. Verbal explanations and information were given to patients who were interested in this study. The multidisciplinary team, consisting of nursing staff, social workers, occupational therapists, clinical psychologists, psychiatrists, medical officers and student nurses also assisted in recruiting participants for this study.

Sixty-four (64) women indicated that they were interested in joining the study. They were contacted telephonically and requested to attend the selection meeting at the clinic, on the appointed date. This meeting was held to screen the women to assess whether they fulfilled the inclusion criteria. See Section 3.6.3.1. All 64 women had to fill in the Personal Profile Questionnaire (PPQ) first to ascertain the duration of use of antidepressant medication and check their demographic data. Then they were requested to fill in the Beck Depression Inventory (BDI) form. Following the scoring of the above questionnaires (PPQ and BDI), three (3) patients were excluded, as their BDI scores exceeded 29. This reduced the group to 59.

However only 45 participants were needed. The 59 women that fulfilled the inclusion criteria were contracted and invited for the next meeting, that was held 2 days later. Once the 45 members were selected using the fishbowl technique, the remaining 14 were informed that they would be allocated to the Control group. Therefore the Control group consisted of 29 members.

These 14 members were telephoned and reminded to attend the three scoring sessions, which were held six weekly. However all 14 failed to attend two scoring sessions and had to be excluded from the Control group. (See Section 3.9.3).

### **3.6.5 Randomization of the sample**

A sample may be described as a selected subset of the population studied. (Polit and Hungler, 1997). The sample of 45 was randomly assigned to the three groups. This was done by drawing coded alphabets (C, V /L, N/F) from a hat, using the fishbowl technique.

Cards were made using capital letter 'C' representing the Control group, capital letters 'N / F' the Nurse-facilitated-cognitive group and capital letters 'V / L' the Volunteer-led-crafts group.

The 45 cards were folded, and were picked by each individual who satisfied the inclusion criteria. Each draw made, indicated the group that they belonged to. Each draw was recorded and removed, until the desired number of 15 for each group was reached the groups was not matched, but because of the inclusion and exclusion criteria, the participants had many aspects that were common amongst the members. These included gender, race, geographical area, mild to moderate depression, using prescribed antidepressant medication and attendance at the same clinic

### **3.7 Measurements**

The following measuring instruments were used in the study.

#### **3.7.1 The personal Profile Questionnaire**

The researcher formulated this instrument. The objective of the Personal Profile Questionnaire (PPQ) was to identify differences and similarities in the participant's individual profiles (i.e. demographic details) and ensured that the participants satisfied the selection criteria for inclusion in the study. It was tested at the Polit study prior to its use in the actual study and was found to be suitable. (See Appendix 7). The participants were required to answer the questions in the same order. Items 1, 2 and 3 comprised closed questions involving fixed alternative responses, whilst items 4, 5 and 6 were open-ended questions.

The questionnaire comprised the following items:

- Marital status
- Educational status
- Employment status
- Participant's age (in years)
- Checking whether the participant was currently on antidepressant medication; and
- the duration of the use of antidepressant medication.

### **3.7.2 The Beck Depression Inventory Scale (1978)**

#### **3.7.2.1 Description of the Beck Depression Inventory Scale**

The Beck Depression Inventory Scale (BDI) was initially designed to measure the severity or depth of depression in psychiatric patients after the clinical diagnosis had been made, but was later used for screening in the community and for clinical research, where it was found to perform well. (McDowell and Newell, 1996).

The BDI Scale (1961) was designed by Beck to specifically measure depression. Originally it was developed to be administered by the interviewer. The statements were rated on a 4 to 7 point intensity scale. The BDI Scale was revised in 1974 and 1978. (Boling, 1991)

In this study the 1978 revised scale was used. (See Appendix 8). It is a self-rating scale, containing four graded levels of intensity for assessing each symptom of depression. The 1961 and the 1978 forms are similar, except that the 1978 version of the BDI Scale is simpler, easier to use and score. There are 21 symptoms of depression. Fifteen items relate to emotions, four to behavioral changes and six to somatic symptoms. (Kavan, Pace, Ponterotto and Barone, 1990). Each symptom or category is describe by statements, rated on a four-point intensity scale (0-3), linked to the range of severity of symptoms. In a few categories, there are two alternative statements. (Bowling, 1991).

The 21 items measured are: sadness, pessimism, sense of failure, dissatisfaction, guilt, expectation of punishment, self-dislike, self-accusations, suicidal ideations, crying, irritability, social withdrawal, indecisiveness, body image change, work retardation, insomnia, fatigability, anorexia, weigh loss, somatic pre-occupations and loss of libido. (McDowell and Newell, 1996)

### **3.7.2.2 Scoring of the BDI Scale**

Scoring is simple and is done by totaling the score of the 21 items.

The interpretation of the scores are as follow:

0-9	indicates no depression
10-15	indicates mild depression
16-19	indicates moderate depression
20-29	indicates moderate to severe depression

A score of 30 or more signifies severe depression. (Kavan, et al, 1990).

### **3.7.2.3 Reliable and validity of the BDI Scale**

This scale has been used over 500 reported studies. (Kavan et al, 1990). The Beck Depression Inventory Scale is a consistent measure, measuring what it is set out for, with high reliability and acceptable levels of validity. Its correlations are moderately high ranging from 60 to 90 which is the gold standard of psychiatric rating of depression. (Kavan et al, 1990). The accuracy of answers to the questions depends on the participants, as the responses are subjective. (Bowling, 1991). This measure is generally sensitive to changes in depression in patients and may be used periodically to measure progress answers to the question depends on the participant, as responses are subjective. (Bowling, 1991). In view of the fact that the purpose of this study was to evaluate the effectiveness of interventions in terms of the level of depression before and after the implementation of the intervention, this scale was regarded as the most suitable to use for obtaining data for this exploratory survey.

### **3.7.2.4 Limitations of the BDI Scale**

It is not able to asses the duration of symptoms. It is not able to rule out depressive symptoms, resulting from normal bereavement, organic disorder or psychosis. It tents to over-diagnose depression when the BDI is used in certain groups. (Kavan et al, 1990).

The above limitations were not relevant for this study. The patients were already diagnosed with depression and an assessment of the duration of symptoms was not required. The scale was only being used to detect changes in the levels of depression in relation to the use of group intervention during the course of the study. The tendency to over diagnose depression was preferable to under diagnosis, as the testing of the interventions was thereby rendered more vigorous.

### **3.7.3 The Rosenberg Self-Esteem Scale 1965**

#### **3.7.3.1 Description of the Rosenberg Self-Esteem Scale**

Rosenberg (1965 in Bowling, 1991) described self-esteem as a feeling of self-acceptance or self worth. Depressed often accompanied a low-self esteem as had been shown in the literature review. Therefore it was decided that self-esteem levels should be measured in order to assess the effectiveness of the interventions. The Rosenberg scale consist of ten statements and was initially designed as a Guttman Scale. This scale has a Likert response format. (Morris Rosenberg Foundation, 2002). Presenting positive and negative statements alternatively has reduced respondent set. (Rosenberg, 1965). (See Appendix 9 for RSE scale) it is a self-rating scale. According to Bowling (1991), the responses corresponded to a four-point continuum, ranging from:

1. Strongly agree
2. Agree
3. Disagree; and
4. Strongly disagree.

This scale is short, simple, one-dimensional and easy to administer.



Positive items on this scale reflect low self-esteem and are indicated by asterisks are not to be printed on the respondents questionnaire, as instructed by Rosenberg. (Morris Rosenberg Foundation. 2002).

### **3.7.3.2 Scoring of the RSE Scale**

The ten statements or items and numbering are described according to Rosenberg Self-Esteem Scale used in the study and in the scale items. This items were:

1. On the whole I am satisfied with myself
2. At times I think I am no good at all
3. I feel I have a number of good qualities
4. I am able to do things as well as most other people
5. I feel I do not have much to be proud of
6. I certainly feel useless at times
7. I feel that I am a person of worth, at least on an equal plane with others
8. I wish I could have more respect for myself
9. All in all I am inclined to feel that I am a failure; and
10. I take a positive attitude towards myself.

Rosenberg (1965) referred to the RSE Scale as the D- 1: Self-esteem Scale. The Scale items I to IV corresponded with items from number one to ten of the RSE Scale. The 10 items were assigned under Scale items I, II, III, IV, V and VI as shown below:

- Scale item I comprised item 3, 7 and 9. If the respondent answered 2 out of 3 or 3 out of 3 positively, this item was scored positive. If the answer was 1 out of 3 or 3 or 0 out of 3 positively, a negative score for this item was received
- Scale item II consisted of item 4 and 5. One out of 2 or 2 out of 2 positive responses were positive for this scale item
- Scale item III was number 10

- Scale item IV was number 1
- Scale item V was number 8
- Scale item VI was number 2 and 6. 1 out of 2 or 2 out of 2 out of 2 positive responses were positive.

(Rosenberg, 1965: 305- 306)

The positive and negative scores of item I, II, III, IV, V and VI were added. Each item was not determined only by its relationship to the total score, but by its patterned relationship with all other items on the scale. A high positive total score represented low self-esteem and a high negative total score, high self-esteem, according to the D-1 scale. (Rosenberg, 1965)

#### **3.7.3.3 Validity and Reliability of the RSE Scale**

This scale has face validity and is internally reliable. It has acceptable predictive validity for clients with depression. Rosenberg (1965) reported reliability to be good, as well as a reproducibility coefficient of alpha of 0.92 and a scalability coefficient of 0.72 Ward (1977 in Bowling, 1991) reported a coefficient of alpha of 0.74 for internal consistency. Silber and Tippet (1965 in Bowling, 1991) showed a test-retest reliability of 0.85 when the scale was used on 28 students.

#### **3.7.3.4 Limitations of the RSE Scale**

Howcroft (1990) stated that it was very difficult to control the faking of responses to a self-esteem scale. Individuals would try to fake responses as a self-protective value to themselves. Similarly Adler (1997) reported that the biggest limitation of all measures of self-esteem was that responses were susceptible to being socially desirable.

Self-esteem was reported to be a stable characteristic of adults, and was not easily manipulated in experimental design. Self-esteem cannot be taught, but develops through a person's life-experience. (Morris Rosenberg Foundation, 2002).

However, in this study no patterned relationship between the items was noted, and there is no certainty that responses were or were not faked.

### **3.7.4 The Social Readjustment Rating Questionnaire (1967)**

#### **3.7.4.1 Description of Social Readjustment Rating Questionnaire**

This scale was also known as the Holmes and Rahe Scale (1967) adjustment to change and to social events has been linked to the onset of illness. Life stress was associated with both illness and depression. Family stressors were linked to depression, especially amongst housewives. (Stewart and Salt, 1981).

This scale was modified to 35 life-events. This scale was only used in the Pilot study. In the main study the Life-Experience Survey Questionnaire was used instead of the SRRQ, as it appeared to be more suitable and descriptive.

The original SRRQ scale consisted of 43 life-events. Eight items were excluded from the questionnaire, as they were not appropriate for the study. These were jail-term, beginning or end of school, revision of personal habits, changes in schools, change in recreation, foreclosure of mortgage or bond, mortgage or bondless than \$ 10,000 and trouble with the boss. The scale used in the study consisted of 35 life-events: death of spouse, close family member or friend, marriage, marital separation, marital reconciliation or divorce; work problems, retirement; pregnancy or sexual difficulties; mortgage bonds; children leaving home; trouble with in-laws or partner; changes in daily activities and violation of the law. Each item is in rank order and is given a corresponding value, on which the participant rates himself or herself. The highest value is 100 and the lowest 11. (See Appendix 11 for the Scale). This questionnaire is useful, simple, easy to understand and score.

#### **3.7.4.2 Limitations of the SRRQ Scale**

The SRR Questionnaire listed the life-event and corresponding score according to the hierarchy of events, whilst the Life-Events Survey questionnaire was able to rate the positive, negative impact and the timing of the life-events. Therefore, the Life Experience Survey questionnaire was preferred instead of the Social Readjustment Rating questionnaire.

#### **3.7.5 Life-Experiences Survey 1978**

##### **3.7.5.1 Description of the Life-Experience Survey**

The original scale consisted of 57 items. Ten items from this scale were omitted as they were designed for students and were inappropriate for this study. This modified LES was used in this study consisting of 43 most commonly, experienced life-events. It measures life-changes and is useful clinical and research tool. It allowed the respondents to indicate the impact of stressful life-events, which they had experienced within a specific time period. (Sarason, Johnson and Siegel, 1978). (See Appendix 12 for the LES Scale).

##### **3.7.5.2 The scoring of the LES**

Rating of the perceived impact of each life-event are on a seven-point scale as follows: extremely negative (-3), moderately negative (-2), slightly negative (-1), no impact (0), extremely positive (+3), moderately positive (+2), slightly positive (+1). The time when the stressful life-events occurred are marked by the participants, whenever it took place in the past 6 months and past 1 year or past 6 weeks. (Sarason, Johnson and Siegel, 1978).

##### **3.7.5.3 Validity and reliability of the LES**

This scale were planned to exclude shortcomings in previous life-stress scales, by making certain items more specific. This scale showed good discrepant validity. Test-retest reliability coefficients was found to underestimate the reliability of this measure.

Test for significant of the difference between correlations found that the positive and negative changes scored differed significantly in their correlations. Previous studies have shown a significant relationship between negative changes and scores on the BDI. (Sarason, Johnson and Siegel, 1978).

#### **3.7.5.4 Limitations of the LES Scale**

Some of the participants had experienced the same problem from the beginning of the study until the end, for example financial, relationship and sleeping problems. The LES Scale identified life-events, but was not sensitive enough to changes in the BDI and RSE Scales.

#### **3.7.6 Assessment of Exercise levels**

Exercise was not introduced to the participants as part of the intervention in the study. In view of the link between exercise and depression levels, it was described to assess whether exercise levels changed within the course of the study. The researcher formulated a question on exercise. A Likert scale was designed, and the participants marked a cross against the appropriate answer of their choice. This is an untested instrument. All three groups were requested to indicate at Post-test 1 and Post-test 2, whether their exercise levels were “more”, “less” or the “same”. (See Appendix 10 for the question on exercise).

It performed adequately in measuring the participant’s perception of exercise. However, it was not possible to validate actual exercise levels.

### **3.8 Pilot study**

The Pilot study was conducted in December 1999 in a different community psychiatric clinic to the one used for the main study. The Pilot study was conducted to assess the instruments in terms of clarity from a time perspective. It involved the administration of the instruments to 10 psychiatric patients attending this clinic. These participants had complied with the sample selection criteria to be used in the main study, and therefore were representative of the population that the instruments would be used on.

Patients attending the clinic were verbally requested for their participation. The first 10 to volunteer were given an explanation of its purpose and the ethical measures to protect individuals rights. All 10 participants readily agreed to complete the instruments. The instruments were the Personal Profile Questionnaire, the Beck Depression Inventory Scale (1978), the Rosenberg Self-Esteem Scale (1965), and the Social Readjustment Rating Scale (1967). All 10 participants fitted the inclusion criteria as outlined in Section 3.6.3.1. The participants filled in the questionnaires individually. There were no areas of non-responses.

The participants informed the researches that the instruments were easy to read, understand and answer. Conducting the Pilot study was informative. It took the participants approximates 5 to 7 minutes to complete the package of questionnaires.

As a result of the Pilot study and on presentation to academic researchers for advice, it was decided that one of the instruments should be replaced, as explained in Section 3.7.4.2. The Social Readjustment Rating Questionnaire (Holmes and Rahe, 1967) was found to be unsuitable and exchanged with the Life Experiences Survey Questionnaire (1978). The remaining data collection methods were found to be suitable. The Pilot study proved to be of value to the researcher as it provided an opportunity to rectify misunderstandings, make improvements and address problems prior to the actual study.

### **3.9 The interventions**

Group interventions were implemented in both the Experimental group 1 and Experimental group 2 as a form of therapy for depressed women. The Control was the comparative group, and therefore no group interventions were implemented. Participant from the Experimental group 1, Experimental group 2 and the Control group continued using their “usual” or “standard” treatment which they received from the clinic. (See Section 3.8.1)

Group sessions were held over a period of 14 weeks for the two group interventions. In addition to the interventions, the following activities took place: Session 1 was the Selection week, Session 2 was the Information session and Pre-test scoring. Week 7 (6 weeks from the start of the study) was the Post-test 1 scoring session and Week 13 (12 weeks after the start of the study) was the Post-test 2 scoring session. The participants from these groups attend the clinic to receive their standard treatment on other days.

There was a different Independent (treatment) variable for each of the two Experimental groups. In Experimental group 1, the Independent variable was the introduction of a structured, Nurse-facilitated cognitive group intervention for 15 sessions. In the Experimental group 2, the independent variable was the introduction of Volunteer-led crafts group intervention for 15 sessions. All three groups (Experimental group 1, Experimental group 2 and the Control group), also had to continue with standard treatment from the clinic over the 14 weeks. This included the collection of antidepressant medication, being interviewed by a nurse monthly and a doctor three monthly and/or as required.

<b>GROUP</b>	<b>INTERVENTIONS</b>
E1	Experimental group 1 = Nurse-facilitated cognitive group sessions
E2	Experimental group 2 = Volunteer-led crafts group sessions
C	Control group = No interventions

**FIGURE 3.1: Diagrammatic description of the 3 comparison groups in relation to the intervention**

The groups met at the clinic, as this venue was known and acceptable to the participants. Three different rooms were used for each group, so that the participants did not make contact with each other.

Participants were only allowed to have contact with members in their own group. The reason for this was to promote confidentiality, and reduce the possibility of knowledge of the interventions being used in other groups, influencing outcomes of the study.

The rooms were in quiet areas so that there would be no interactions, and on different floors. The rooms had tables and chairs for the scoring and group sessions.

Refreshments were provided for all the participants at every group session. As they had to use public transport to reach the clinic for the group sessions, their bus-fares were paid so that they would not be out of pocket by participating in this study. A farewell lunch was given for all the participants at the end of the study.

Equipment and writing material had to be provided by the researcher. An attendance register was kept for each group, as well as separate files for questionnaires and confidential notes on the group sessions. All this data was kept in a locked cupboard, and was only accessible to the researchers.

### **3.9.1 Nurse-Facilitated Cognitive Group Intervention**

#### **3.9.1.1 The role of the Facilitator**

The researcher was the facilitator for the Nurse-facilitated-cognitive group interventions in Experimental group 1. The role of the facilitator was to introduce the group discussions and direct and facilitate the group process. The researcher used such communication techniques to keep the group discussions flowing as paraphrasing, clarifying, probing, reflecting and summarizing. The facilitator encouraged all participants to share their viewpoints and experiences. At the beginning of each session the facilitator initiated the theme prayer that “Change is constant” from Gordon’s Women’s Workbook (1988 b). At the end of each session, the facilitator made notes on the group process and recorded the group attendance. The facilitator also informed the group of the date and topic of the next session.



The programme could have included homework but this was not given to the participants, as costs in purchasing the Women's Workbooks was not possible. The facilitator issued the questionnaires and processed them as well after each scoring session.

### **3.9.1.2 The venue and equipment for the group sessions**

The group sessions was held in a downstairs room, away from any possible disturbance from the Volunteer-led crafts group sessions. Sixteen chairs were placed in a circle for group discussions. Each member had a nametag that was written in code letters, to record information and maintain confidentiality when filling in questionnaires.

### **3.9.1.3 Nurse-facilitated cognitive group sessions**

Verona Gordon uses 20 sessions in both her manuals. The Women's Workbook (1988b) and facilitator's Manual (1988a) have 20 similar topic for the group sessions, except that the workbook also has homework exercises. Due to time constraints the facilitator used 12 topics over 13 weeks for this study. Gordon's found that it was sometimes necessary to complete the group sessions in 12 to 14 weeks due to time restraints (Gordon. 1988 a). Time limitation in this study did not permit 20 sessions. Therefore, the researchers chose 13 topics that would assist in de-stressing and empowering the participants. (See Chapter One, Section 1.6) Omitting topic was not an easy task, as all topics were useful and important. The topics omitted were relationship to self; relationship-understanding our family of origin; relationship to others; loss-grief-termination communication and networking; nutrition and sexuality. Reflection sessions were part of Gordon's Facilitator's Manual (1988a) and Women's Workbook (1988b) sessions. In these sessions the women were expected to reflect on the past 3 or 4 sessions. Discussions related to knowledge gained on the content presented, change of behavior within the women and the progress made from the preceding group sessions.

A description of the Nurse-facilitated cognitive group sessions is provided hereafter. The objectives that are listed were determined by Gordon in the Facilitator's Manual (1998a) and in the Women's Workbook (1988b).

- **Session 1**

**Selection session**

This was the selection session, where the participants were screened to assess whether they met the Inclusion criteria for the study. Therefore, the Personal Profile Questionnaire and the Beck Depression Inventory were completed to make this assessment.

- **Session 2**

**Orientation and information session**

The objectives of this sessions were to share information and orientate the participants who fitted the Inclusion criteria. At this session they also filled in the Rosenberg Self-Esteem Scale and the Life-Experiences Survey questionnaires.

**Discussion**

This was an orientation session of the group process, rules, the topics, time and venue.

- **Session 3**

**Purpose of Women's groups**

To understand the benefits of group sessions for depressed women.

To identify the factors that comprise a good, typical group session.

To understand the overview of the total program, and the themes repeated during the group sessions.

**Discussion questions**

What can I do to get the most benefit out of attending the group?

What might I do to help other women participants benefit from attending the group sessions?

- **Session 4**

### **Goal-setting**

#### **Objectives**

To understand goal setting.

To understand the purpose of goal setting.

Each individual to brainstorm one goal (short-term) that they would like to fulfill.

#### **Discussion questions**

What is a realistic/ unrealistic goal?

What blocks do women find in achieving their aims?

- **Session 5**

### **Feelings and depression**

#### **Objectives**

To understand depression, anxiety, dependence and anger and their relationships.

To know the feeling, thinking and behavioral components of anxiety, dependency and depression.

#### **Discussion questions**

Which feeling do you have difficulty expressing?

(resentment, jealousy, anger, guilt, passion)

What cultural messages do women get about expressing their anger?

How does the cultural messages you receive affect how you behaviorally express your anger?

- **Session 6**

### **Cognition and feelings**

#### **Objectives**

Define cognition.

Identify irrational and negative thoughts.

Explain the relationship between cognition and feelings.

Begin to understand your irrational and negative thoughts.

### **Discussion questions**

What are some of your irrational and negative thoughts?

Where do irrational thoughts come from?

What irrational thoughts does the media, tend to reinforce amongst women?

What personal irrational or negative thoughts would you like to change?

What does it mean when women respond to suggestions to bring about change with “Yes, but...If only...?”.

The tables below reflects the programme for the 15 group sessions.

**Table 3.1: Programme for the Nurse-Facilitated Cognitive group sessions**

<b>Week no.</b>	<b>Date</b>	<b>Time</b>	<b>Description of group sess.</b>	<b>Number of sess.</b>
0	3 May	11h30-12h30	Selection: <b>Pre-test scores PPQ and BDI</b>	1
1	19 May	11h30-12h30	Orientation: <b>Pre-test scores RSE and LES</b>	2
2	17 May	11h30-12h30	The purpose of women's group	3
3	24 May	11h30-12h30	Goal setting	4
4	31 May	11h30-12h30	Feelings and depression	5
5	7 June	11h30-12h30	Cognition and feelings	6
6	14 June	11h30-12h30	Building self-esteem	7
7	21 June	11h30-12h30	Reflection 1: <b>Post-test 1 score</b>	8
8	28 June	11h30-12h30	Conflict management	9
9	5 July	11h30-12h30	Assertiveness training	10
10	12 July	11h30-12h30	Stress relief	11
11	19 July	11h30-12h30	Relaxation and exercise	12
12	26 July	11h30-12h30	Reflection 2	13
13	2 August	11h30-12h30	Post-test 2 score	14
14	10 August	11h30-12h30	Termination and closure	15

Reflection 1 & 2 = Refers to recalling on the past group learning (GORDON, 1988b)

Key: sess.= sessions

No= number

## **Session 7**

### **Building self-esteem**

#### **Objectives**

Define self-esteem...What it is, what it is not?

Identify sources and symptoms of self-esteem.

Know the steps to take to feel good about yourself.

#### **Discussion questions**

What does identity-seeking mean?

How do I find the purpose of my life?

What happened during my childhood relationships, with my mother and father that build trust or mistrust?

## **Session 8**

### **Reflection and 6 week score**

#### **Objectives**

To understand the purpose and benefits of the process of reflection for any individual.

To identify learning that has occurred in the first 5 group sessions.

To discuss the implications of the discussions held in the pervious group.

#### **Discussion questions**

How did I function in the past group sessions?

What did I do well?

How could I improve in the next session?

What was the most helpful topic?

What subject or discussion was the most meaningful to me, in brining about a change in the way I think or believe?

What is the most difficult for me to accept about my past?

Do I do a better job taking care of myself physically and emotionally today, than I did before the group began?

## **Session 9**

### **Conflict management**

#### **Objectives**

Identify the steps involved in interpersonal problem solving.

Identify the sources of conflict in your life.

Understand the myths and realities pertaining to “battered women”.

#### **Discussion questions**

As a women, what are the traditional ways we have attempted to handle conflicts in our lives?

What various “roles” do I currently carry?

Why do women stay with abusive men and what can be done to stop this chain of violence?

## **Session 10**

### **Assertiveness skills**

#### **Objectives**

Describe passive, manipulative, assertive and aggressive behaviors.

Recognize and start to build assertiveness skills.

Identify ways to set limits and to cope with criticism.

#### **Discussion questions**

What are the consequences of women staying in non-assertive positions throughout their lives?

Can you describe an example of feeling powerless, helpless or being in a situation where there was a lack of positive reinforcement or recognition for your work?

How do we give assertive messages verbally and non-verbally?

## **Session 11**

### **Relieving stress**

#### **Objective**

Define stress (healthy and unhealthy).

Identify physical and psychological reactions to stress.

Ways to avoid unnecessary stress.

#### **Discussion questions**

Which women may be prone to stress?

How do women react to stress?

What do I perceive as major stressors in my life?

What 3 important factors are involved in any stressful event?

What can I do to lower my stress levels?

How can I help others to cope with their stress?

## **Session 12**

### **Relaxation and exercise**

#### **Objectives**

Learn how to relax, as well as exercise.

Identify the relationship between stress and muscle tension.

#### **Discussion questions**

What is the value of relaxation and daily exercise?

How does physical exercise affect our body organs as well as our minds?



## **Session 13**

### **Reflections**

### **Objectives**

Describe what you have learned from the past 6 meetings.

### **Discussion questions**

How have I changed in myself since the first meeting?

What has been most helpful in bringing about change in the way I think or believe?

What have I learned about myself that has affected my self-esteem and my body image?

What is the most difficult for me to accept about my past?

Do I do a better job taking care of myself physically and emotionally today, than I did before

I joined the group?

## **Session 14**

### **Post-test 2 scoring sessions**

This session was to score the members after 12 weeks of group sessions, using the BDI, RSE, LES and exercise levels. At this session the termination process was started and the need identified for the termination party.

## **Session 15**

### **Termination and closure**

### **Objectives**

Identify the feelings you have regarding the termination of group sessions.

Share with group members your growth while attending the groups.

Understand what it meant by a healthy termination of relationships.

## **Discussion questions**

What aspects of attending the groups increased your self-esteem?

How can I handle separation now that we have grown together, and shared so much?

What can I do to continue my growth as a person, without the support of my group?

What would be unhealthy ways of closure of the group sessions?

(Verona Gordon's Facilitator's Manual, 1988 a and Women's Workbook, 1988b).

A farewell lunch was held at the end of this session, at which all participant were present.

### **3.9.1.4 feedback of the Nurse-Facilitated cognitive group sessions**

#### **Session 1: Selection session**

This session was the screening session. The participants filled in the Personal Profile Questionnaire and the Beck Depression Inventory Scale. On completion, the questionnaire were assessed, to ascertain that the inclusion criteria were met for the participants to be part of the study.

#### **Session 2: Orientation**

The researchers, who acted as the groups facilitator, predominantly led this sessions. This was the first meeting where the selected members met. The majority of the member had seen and sat next to each other in the waiting room, but had not interacted with each other. Orientation and discussion was on the dates, times, venues, attendance register, confidentiality, topics themes and the general rules of the group sessions. All the members were introduced to each other and exchanged names and a short personal account of themselves. The member were informed of the date and the topic for the next session. All the following 13 sessions were done in accordance with the topics, themes and sessions form Gordon's Facilitator's Manuel (1988a) and from the Women's Workbook (1988b).

At the beginning of each session the theme that "Change is constant" was repeated to reinforce changes and choices women would make in empowering themselves.

### **Session 3: The purpose of Women's groups**

All 15 of the women arrived at least 30 minutes before the group sessions. They were smartly dressed and were excited to be a part of the group. Some members were a bit uneasy about meeting new people and joining a group for the first time. All the members were requested to sit in a circle. The members were welcomed and introductions were made. Refreshments were served and there was interactions noted amongst the members. After this snack break, the researcher, who was facilitator, explained the group sessions. The purpose, the benefits, what a group consisted of, the member's roles and an overview of the entire programme for the group sessions was outlined.

Aspects, such as confidentiality, trust, stigma and punctuality were also discussed. These aspects were of great concern to the members and they agreed to abide by the rules, as planned.

### **Session 4: Goal setting**

The facilitator initiated the group sessions by informing the group of examples of long-term and short-term goals, as an introduction for this meeting. A brief explanation of what a goal was, and how to meet the goal was given.

In this meeting, it was found that many had not consciously planned a goal for themselves, in their present lives. They were caught up in the routine chores and daily activities to sustain their families. They had, in some instances, forgotten how important they were to themselves. A few had role models, who they interacted with and from whom they could learn. The majority of the members had very little experience in goal setting. Some members felt a little anxious and inadequate in trying to plan a goal for themselves. With some thought and brainstorming in the group they were each able to set specific short-term individual goals.

They highlighted barriers or blocks, which were problematic in setting goals. This included demands of their teenage children, too many chores, lack of finance and marital problems. Additional factors, which they reported were uneasiness, fear of setting goals, seeing themselves as useless and lacking potential. However, with a bit of persuasion they realized that they could set their own goals. The most common goals set were to try and obtain work in the open labour market, be a part-time or full-time, and to become financially independent. The methods planned included opening a small business enterprise to earn and supplement the income at home by selling handbags, baking cakes at home, selling clothing door to door, selling eggs at the flea market and running a tuck shop.

Other goals were working on a better relationship with their teenage children and improving their marriages. The goals set were realistic and appropriate to their life-styles, needs and resources that were available to them. Physical and spiritual goals were noted to be of little interest.

During this meeting the strength, abilities, personalities and potentials that the women had not seen in themselves emerged. They now understood their low self-esteem, lack of motivation and encouragement. They had seen themselves as dependent, pathetic, helpless and useless individuals, especially in their homes.

However they lacked role models and supportive figures in their lives. Immediate members in some of the families were identified as deterrents, as they reinforced the inadequacies and insecurities of these women, rather than motivating and supporting them.

### **Session 5: Feelings and depression**

The facilitator initiated this session by giving explanations on sadness, depression, its effects, feelings, thoughts and actions associated with depression.

Many of the women had little insight into the disease process, consequences and outcome of depression, the use of medication, prognosis and recovery process.

They did not know the action of their medications, side effects, usual duration of treatment, generic names, additive effects nor the reasons for tapering off the treatment. The reasons given were that they were not secure enough to ask the clinicians about their treatment, and question certain procedures, but were content to collect the so-called “happy pills”, month after month. Prior to attending the group they were not aware that so many of the clinic clients suffered from depression and had similar experiences in their home environment.

### **Session 6: Cognition and depression**

The members gave feedback that cultural messages were learnt in the home and the community as children, and in adulthood from other people, from written articles and from the television. Their parents did the primary socialization and teaching at home. Some of the cultural messages, which they had learnt during their childhood, were recounted. These included being “obedient”, “have manners”, “perform household and other tasks delegated to them by their parents”, accept discipline meted out by verbal and physical methods, “they were not allowed to question instructions or authority by parents”, “the male was seen as the superior figure”, and “the male child was given more privileges and had to assist dad with maintenance chores in and around the house”.

The women in the group verbalized their varying individual life experiences. They also described themselves as sensitive people, those who could cry easily, felt rejected, felt sorry for themselves and at times were not able to face their own fears. Initially they felt negative about attending the group sessions, and kept their individual and family problems as secret.

They also expressed feelings of being ashamed, scared, nervous, tired, miserable, embarrassed and sick. The common thoughts from many members were that they wanted approval by everyone, wished to be liked by everyone, they could not do things perfectly and there was probably something wrong with them, felt life was unfair to them because of the stresses that they experienced. They wished to be happy.

During the discussion they were able to reveal intimate details of family life and suffering. Support and fellow members in the group offered reassurance to them. Many of the spouses and close family members did not attend or support the patient in her treatment programme. They were either unaware of or felt that there was no need for the wife to take medication. Some of the women chose to attend secretly or discretely because they were labeled “mad” or “mental”, by friends and family.

They were not aware that their conditions were worsened by external and environmental factors. Many remained in stressful home environments by choice, because of difficulties in decision-making or they were not prepared to leave the material items and comforts that they owned in their homes. They remained in their usual environment, because they felt the home provided the children with the essential, physical daily needs for living, although it was not therapeutic emotionally and or spiritually.

Many did not fully reveal their problems to the health workers or clinicians. This was because different staff members interviewed them monthly, as well as the large crowd waiting to see the staff making time for questioning limited. It was also difficult to reveal certain information about the problems surrounding their illness because of fear and embarrassment. It was at the group sessions that their trust was established.

### **Session 7: Building of self-esteem**

This discussion was initiated by defining self-esteem and identifying the sources of self-esteem. They also looked at their childhood and the formation of relationships of trust. Many members had little faith in themselves at this stage.

In their early lives they had parents, who did the best that they could in giving them the comforts of life which they could afford. Their childhood were based on cultural norms and values such as hard work, honesty, discipline meted out by elders, support by family members, participation in religious activities, regular attendance at school, sharing and caring

and obedience to rules laid down in the home the law of society and of the country. They coped and struggled with the influences of westernization, modernization creating more liberalism and changes, which conflicted with certain daily rules in the home and in the family.

In their marital lives and within other relationships, they were dependent on their spouses and other relatives for finance and accommodation due to the patriarchal system, which further reduced their self-esteem. They also felt they had failed to develop their talents due to lack of finance or arranged marriages as expected by their respective families. When they thought about the past, they felt disappointed that they failed to progress in formal occupations. Some found the idea of marriage, children and having a spouse to be exciting and creating family pride, whereas others stated that their choices would be different the next time around. They found that life was not always as pleasant as they had wished. They had experienced great trials, happiness, unhappiness and difficulties, which created enormous social and psychological stress leading to depression.

They had a tendency to compare themselves with other women and other families. Other remarked that they were impatient and demanding upon themselves and were anxious, insecure and often tried to please other people rather than themselves. This created a false feeling of happiness, frustration and dissatisfaction with themselves.

Some came from happy childhood environments, but were married and living in stressful home environments. They struggled to feel good about themselves. They felt that they were always being put down and very little praise was given to them, which only made them feel worse. They felt that they were putting a lot of effort into their relationships, but were living with ungrateful and uncompromising individuals.

During the discussion they were able to identify their low self-esteem and made suggestions and discussed ideas about the ways they were going to try to feel good about themselves and to have more positive self-esteem.

They were very keen to ensure an improved self-esteem of themselves, although they felt that they lived in dysfunctional home environments.

### **Session 8: Reflection and Post-test 1 scores**

This session involved the scoring (1<sup>st</sup> Post-test scores) of the BDI, RSE, LES, exercise levels as well as reflection on the 6 group intervention sessions. An explanation was given to all members of what reflection meant and its purpose for each person in the group. Learning that took place during the previous 6 sessions was identified and discussed by the group members.

This was a very effective feedback session. Group cohesion and interaction was observed amongst the group members. They became friends, exchanged addresses and telephone numbers, travelled from home and back together and displayed evidence of sharing and caring for each other. Members expressed their feelings of togetherness with depression as their common link.

They reported that they enjoyed the group session, the first one of this nature, in which they had participated. They commented that they felt more empowered and that they understood their condition.

However, some blamed themselves for being weak and depressed, and were not able to associate this weakness with the loss of control from depression and their stressful life situations. Some felt that they would never be rid of depression and would have to be on medication for the rest of their lives. Other believed their spouses that they were weak and brought this illness upon themselves.



There was more understanding from the members following the 6 group sessions. They now saw themselves as important and beautiful people. They wished for more group sessions run on a similar lines. By this stage members that were usually very quiet, felt free to verbalize their problems and achievements in the group as they had attained trust in the group. A sisterhood of the women was established. Some members, by their own choice, brought light snacks for tea. They enjoyed the refreshments provided, and the majority were happy to receive the bus-fare so that they could attend the following sessions. They felt that the most beneficial sessions addressed feelings, depression and the building of self-esteem.

Lack of knowledge about depression was highlighted by the members and they reportedly received more information in the group than they ever received previously about their illness. Most of the women expressed feelings of loneliness and thoughts of being the only person with this type of illness. Their attires, outlooks and behaviors were changing towards being more positive and resourceful, and others who interacted with them commented on the positive effects and improvements achieved by the women themselves. This was very rewarding for the women, and it made them more enthusiastic to attend more group sessions. This was indicated by the fact that they had started to arrive early for the group sessions. Also if their child minder was not available, they brought their children or grandchildren who were not attending school to the sessions. This was not taken into account when planning for the group sessions. The researches made provisions for another room, refreshments and toys and materials for the children to occupy themselves, whilst the group was in session. Each member gave feedback about the effects and the implications of the sessions for herself. These results presented verbally were very positive.

## **Session 9: Conflict management**

The facilitator introduced the topic of conflict management. The discussion was centered around the sources of conflict, wife battering , problem-solving and coping mechanisms to counteract conflict.

On discussion the source of conflict, the members expressed problems in communicating, finance, relationships, use of alcohol and dagga by their partners, incompatibility, living with spouses who were psychiatric patients, accommodation, unemployment, children, in-laws, relatives, neighbors and being overburdened as a wife and partner with enormous role expectations. These problems resulted in depression as well as physical problems such as headaches, ulcers, arthritis and hypertension.

The majority of the members lived in dysfunctional marital relationships, and had no desire or plans to leave these relationships. They did not have adequate knowledge about coping with conflict, but they usually coped in an instinctual or impulsive manner, which did not help the situation, but rather made it worse. They got very angry, sometimes verbally or physically aggressive, screamed, shouted, became hysterical, panicked, cried, withdrew, attempted suicide, left home and became frustrated and irritable. Only one member was able to use confrontation effectively. They majority had to remain subordinate or else face physical or verbal attacks, such as finances for housekeeping and were asked to leave their marital home.

Four of the 15 members became depressed following their marriages to psychiatric patients, and they complained about the difficulties they had coping with certain conflict situations with their husbands.

Divisional therapy, relaxation therapy and exercise were not used by the members to relieve conflict-induced stress, and were therefore encouraged by facilitator.

They were able to discuss alternative methods of effective communication, understanding the problem behavior and the use of positivism, co-operation, compromise and confrontation. The majority of the members did not feel confident about confrontation, but were prepared to try it out very tactfully in certain situations. They wished to first practice the less threatening ways of dealing with conflict. They preferred to use the basic problem solving steps, such as describing the problem, expressing their feelings and checking the outcome to try and resolve the problem. They were still very fearful of their partners as far as using more active methods, in case there were repercussions.

The women all wished for change of conflict in their homes, but understood that it would take some time, and that they would need to make use of friends, relatives and professional counselors if conflicts presented constant and or major crises. Many of the spouses of the women did not wish to be involved in their treatment programme, and this created a communication gap, between the health professionals and the family.

#### **Session 10: Assertiveness training**

The discussion of assertiveness training was a very important aspect and a difficult concept that the members encountered and struggle with. It appears that the members found it very difficult concept that the members encountered and struggle with. It appears that the members found it very difficult to assert themselves, and chose to live their lives in a non-assertive manner.

Part of the problem stemmed from the cultural and patriarchal system, which discourages assertiveness and rather encourages ladylike, quite, submissive behavior.

This originated in childhood, in family systems, educational and religious systems.

Assertiveness philosophy encourages a person to stand up for their rights and inform other as to how they feel.

However, the majority of the members of the group were very unhappy about their overload and extra responsibilities at home, thus complicated about getting very little praise and recognition, having to make great sacrifices at home and at work, not being involved in decision making and being expected to be subordinate and submissive to their partners. They conducted their lives as prescribed and felt used, abused, helpless and powerless as adults, parents and wives. They were scared to speak up for themselves because of their partner's dominance and aggression. Instead they withdrew from situations with which they could not cope, and kept quiet allowing the aggressor to control them. At times they felt like children, when their partners refused to allow them to go to work, or visit their parents or even go shopping alone. It felt as though they were children and their parents were saying "no you cannot go". Some members, who tried to be assertive, found that their spouses became angrier whenever they tried to be assertive.

By the 12<sup>th</sup> session, a few women had mastered the art of assertiveness to some extent and had become more successful in their communication with their families.

The other members gained some ideas from the women who had asserted themselves. Others in the group still encountered many problems with assertiveness. In the past some of their partners apparently stated that "they were being aggressive, acting like a man", and were even battered by them for trying to stand up for themselves. However, by this stage the members reported that they were more empowered and were feeling less helpless than when they had first attended the group sessions. The women realized their importance, knew what they wanted, felt capable of making decisions, and were going to try to assert themselves by being honest, and explaining and expressing their wants and needs. Assertiveness training was gradually being learnt by the members, but they were not ready to try it out fully.

**Session 11: Stress relief**

This session consisted of a divisional activity where every member was taught to pot an African violet plant. They were very happy to do this activity. They had a sense of feeling important, ownership and stated that they would enjoy taking care of this plant and would wait for the flowers to appear. This would become a hobby and the plant would become a pet, that they would go to when they were feeling stressed. All the members were very happy to take their plants home.

**Session 12: Relaxation and exercise**

In this session, the members were taught about relaxation and the use of exercise. This was very useful as many members stated that they could not afford to go to the local gymnasium. They often complained of feeling rushed, tired and tense. They were taught deep breathing exercises, stretching exercises, progressive relaxation techniques and massage techniques. They thoroughly enjoyed this session. Some of the members knew other techniques and were able to share them with the other members.

**Session 13: Reflection**

This session consisted of reflection. The members stated that they had enjoyed the previous sessions, and wished that the group sessions could go on indefinitely. Yet, these same women were very reluctant to join the group at the beginning. They were all more helpful and participated fully in the group sessions. As they reflected about themselves, they found that they were more positive and had changed their outlook and behavior towards their health and life.

**Session 14: Post-test 2 scores**

In this session the Post-test 2 scores of members, using the BDI, RSE and the LES, exercise levels were measured. A farewell lunch was planned after the last session.

### **Session 15: Termination and closure**

This was the last group session. The members were very sad that the group had ended. They were happy that they had learnt a lot, formed friendships, were more empowered and had more insight into depression and work group. Their outlook on life and their attitudes were more positive. They wished for more groups of this nature. They were going to meet weekly after this closure to support each other. They were then treated to lunch, which they enjoyed. The women were still taking care of their African violets and continued to meet weekly at the clinic as a group long after the completion of the study.

#### **Written comments from the members of the Nurse-facilitated cognitive group sessions**

“I enjoyed the group very much”.

“The ladies were very supportive, caring and loving”.

“By sharing out problems we learn to help each other”.

“This group gave me a lot of encouragement”.

“I feel coming to the group gave me time out which I needed badly”.

“I felt coming for the group gave me freedom”.

“I hope this group continues so that we could meet with other ladies”.

“I owe it to the group for bringing me where I am now”.

“I enjoyed the group discussions”.

“I found it easy to discuss my life with others”.

“I thought that I was the only one with this problem, but it helped to know that others had similar problems”.

“I enjoyed the lunch and the farewell the most”.

“I enjoyed every bit of the time we spent together”.

“I wish that there will be more groups to keep us occupied for a few hours”.

“By joining the group I was out of my misery, heartache and sorrow”.

“I wish we could get more lunch get-togethers”.

“I have received a lot of information in the group”.

“I don’t feel stupid anymore”.

“I feel better”.

“I thought that I will have this sickness until I die”.

“I thought that I was a weak person”.

“I was always reminded that I am not educated”.

“I was told I will not cope by myself”.

“I know that I can make choices”.

“I know so much about my illness now”.

“I know more about my husband’s psychiatric illness”.

“I am positive”.

“I will overcome my depression”.

“I will stop blaming myself”.

### **3.9.2 Volunteer-led crafts group intervention (experimental group 2)**

#### **3.9.2.1 The role of the Volunteer**

A volunteer was selected as the leader of the experimental group 2. He was orientated on the purpose and the management of the group sessions. It was agreed that in the event of problems or uncertainty, the volunteer would consult with the researcher. The volunteer was able to lead the group without problems. He made contact and had discussions with the researcher prior to the start of each group session or after the session, during the collection of refreshments, bus-fares, equipment, materials and the attendance register.

### **3.9.2.2 The choices of the Volunteer**

The volunteer was chosen on recommendations from the occupational therapy department staff, in the clinic of the study. The volunteer had the following attributes:

was willing to learn, had a pleasant personality, was punctual, was honest, was patient, was responsible and was talented in the making of arts and crafts. The volunteer requested no payment for leading the group.

### **3.9.2.3 The venue and the equipment for the volunteer-led crafts group sessions.**

The group sessions were held in an upstairs room away from the nurse-facilitated cognitive group sessions. In this room there was a large rectangular table with 16 chairs. The researcher provided cotton material, needles, lace, thread, wool, cardboard, a wooden frame with nails, paper cups, 15 African violet leaves, potting soil, glue and scissors, pens, pencils and writing material for the completion of the activities by the participants.

### **3.9.2.4 The Volunteer-led craft group sessions**

Table 3.2 shows the format or programme for the 15 volunteer-led craft group sessions. Purposeful, creative activities were used for these sessions (Experimental group 2), and therefore it can be regarded as a crafts group in accordance with the definition in Chapter 2, Section 2.3.3.2. The items made in the crafts group sessions were woolen dolls, planting African violets, peg-baskets and tablemats. There were no structured information or discussion sessions in this group, rather conversation and handwork. The activities chosen in this group were recommended by an experienced occupational therapist. She stated that these activities were simple, beneficial (as they gave the person a sense of achievement, improved manual dexterity and concentration), appropriate, could be continued by these patients on their own after the group had ceased and were not costly.



Members of this group did continue making similar items at home to those learnt in the group sessions, to supplement their income.

The participants were allowed to work at their own pace. Competition was not encouraged, but rather purposeful activity with a view to reducing their depression levels and improving their self-esteem. The volunteer instructed them on the making of the items. Each participant collected their materials at the beginning of the session from the volunteer and returned them at the end of the session, to be kept in a cupboard until the next session. Once an item was completed the participants could start on the next item. The participants were allowed to keep the completed item as their own. In depressed patients, inactivity and apathy are common problems; therefore purposeful and creative activities were used to provide purpose and meaning for these depressed patients. (See Chapter Two, Section 2.3.3.2).

Table 3.2 shows the format of the volunteer-led group sessions.

**Table 3.2: Format of the Volunteer-led group sessions**

<b>Week no.</b>	<b>Date</b>	<b>Time</b>	<b>Description of group sess.</b>	<b>Number of sess.</b>
0	3 May	11h30-12h30	Selection: <b>Pre-test scores PPQ and BDI</b>	1
1	19 May	11h30-12h30	Orientation: <b>Pre-test scores RSE and LES</b>	2
2	17 May	11h30-12h30	The purpose of women's group	3
3	24 May	11h30-12h30	Goal setting	4
4	31 May	11h30-12h30	Feelings and depression	5
5	7 June	11h30-12h30	Cognition and feelings	6
6	14 June	11h30-12h30	Building self-esteem	7
7	21 June	11h30-12h30	Reflection 1: <b>Post-test 1 score</b>	8
8	28 June	11h30-12h30	Conflict management	9
9	5 July	11h30-12h30	Assertiveness training	10
10	12 July	11h30-12h30	Stress relief	11
11	19 July	11h30-12h30	Relaxation and exercise	12
12	26 July	11h30-12h30	Reflection 2	13
13	2 August	11h30-12h30	Post-test 2 score	14
14	10 August	11h30-12h30	Termination and closure	15

The selection session and the Pre-test scoring session were conducted by the researcher and the orientation session specific to volunteer-led group sessions by the volunteer. The time period allocated for making of the items was as follows:

- 4 sessions for making table mats
- 4 sessions for making the woolen dolls
- 1 session for planting the African violets
- 3 sessions for making the peg baskets. (See Table 3.2)
- At the last session they met the other participants at the fare-well lunch.

### **3.9.2.5 Feedback from the Volunteer-led group sessions**

This group was led by a volunteer, who gave feedback to the researcher. The volunteer attended to the members in the group. He reported that the members chose their places where they wished to sit and work. He also said that there was an excellent working relationship and interaction amongst the group members and himself. They were very relaxed. During the sessions they walked around and talked to each other.

Conversation, interaction and sharing were spontaneous in this group. They understood the step-by-step instructions that he provided for the completion of the items. There were no conflicts reported in the group. Group attendance was excellent throughout, except on the second session due to bad weather.

Members worked on items at their own pace, and started on new ones, once the previous one had been completed. The members expressed pride and joy at the end of their group sessions. They had made a tablemat, a woolen dolls, a peg-basket and each one planted an African violet. They worked well together, shared refreshments and assisted each other with their activities. Some of the members are continuing making items at home. The multidisciplinary team made comments on the positive behavior changes observed amongst the group members.

### **3.9.3 Non-Intervention Group**

#### **3.9.3.1 Description of the sessions**

The control group or the non-intervention group was the comparison group. The participants in this group were 15 in number. This group did not receive any additional intervention, except the standard or usual treatment. The participants in this group only attended the clinic for the Selection session, Orientation session, the 3 scoring sessions (Pre-test, Post-test 1 and Post-test 2) and Closure of the study. At the selection session they filled in the PPQ and BDI questionnaire together with all possible participants.

At the orientation or Pre-test session which was done separately from the other 2 groups, they filled in the RSE and LES questionnaires and were informed about the rules for them as participants in the Control group such as confidentiality and the dates and times of the scoring sessions.

At the Post-test 1 (6 weeks after the start of the study) and Post-test 2 (12 weeks after the start of the study) they filled in the BDI, RSE, LES and Exercise questionnaire in a separate room. The scoring sessions were done on the same day as those of the Experimental group 1 and Experimental group 2.

Therefore apart from sitting together in a room to complete the instruments, there was no group activity. At the last session they joined the rest of the group members from the 2 Experimental groups for the farewell lunch.

#### **3.9.3.2 Feedback from the Control group**

At the first scoring session, attendance was excellent. Thereafter many telephone calls had to be made to remind the members to attend the scoring sessions. Some members stated that they would have preferred to attend the group intervention sessions.

Other preferred to remain in the Control group as they had a number of household and social duties, such as church and temple responsibilities. Those who were keen to join a group were informed that they could join the next group to be run by the clinic staff.

### **3.10 Duration of the study**

The duration of the study was 14 consecutive weeks. The duration of the 2 interventions as well as the timing of the selection, orientation and scoring sessions of the 3 groups is shown in Table 3.3 below.

**Table 3.3: Summary of the interventions, instruments, timing and scoring sessions for the 3 groups**

<b>Session</b>	<b>1</b>	<b>2</b>	<b>3,4,5,6,7</b>	<b>8</b>	<b>9,10,11,12,13</b>	<b>14</b>	<b>15</b>
<b>Group E1</b>	Selection Pre-test PPQ BDI	Orientation Pre-test RSE LES	NFC Group Sessions & Standard treatment	Post-test 1 BDI RSE LES Exercise	NFC Group Sessions & standard treatment	Post-test 2 BDI, RSE, LES, exercise	Closure
<b>Group E2</b>	Selection Pre-test PPQ BDI	Orientation Pre-test RSE LES	VLC Group Sessions & Standard treatment	Post-test 1 BDI RSE LES Exercise	VLC Group Sessions & Standard treatment	Post-test 2 BDI, RSE, LES, Exercise & VLC sessions	Closure
<b>Control Group</b>	Selection Pre-test PPQ BDI	Orientation Pre-test RSE LES	Standard treatment only	Post-test 1 BDI RSE LES Exercise	Standard treatment only	Post-test 2 BDI, RSE, LES, exercise	Closure

Key: PPQ: Personal Profile Questionnaire Survey

BDI: Beck Depression Inventory

RSE: Rosenberg Self-esteem scale

LES: Life-experience

NFC: Nurse-Facilitated group

VLC: Volunteer-led group

Exercise: Exercise levels

### **3.11 Ethical Aspects**

Permission to conduct the study with the clinic was obtained from the Director of Psychiatry of the Department of Health, Community Psychiatric Services, KwaZulu-Natal, the Assistant Director and the Regional Chief Professional Nurse.

A letter was written to Professor Gordon requesting permission to conduct a Nurse-facilitated group using her Facilitator's Manual and Women's Workbook on a group of women in South Africa. (Appendix 1). Permission was granted by Professor Gordon for the use of the books as requested, together with advice that the information required adaptation on the population studied. (Appendix 2).

Letters of explanation and information on being a member in the Nurse-facilitated, the Volunteer-led group and the Control group were given to all the participants in their respective groups. (Appendix 4, 5 and 6).

Informed consent was obtained from the participants subsequent to these explanations of the study. (Appendix 3)

Participation in this study was on a voluntary basis.

Participants were also informed that refusal to participate or the decision to withdraw from the study would not result in any form of discrimination related to treatment care.

The ethical allocation of participants to groups was handled as described. Volunteer from the clinic population were requested by the researcher to participate. These volunteers were screened to ensure that they met the inclusion criteria. Those who met the inclusion criteria were randomly allocated to the 3 groups. The extra participants were placed in the Control group, because the size of the intervention group could not be increased. Participants in the Control group were afforded an opportunity to join an intervention group after the conclusion of the study in the

Unique code numbers were used in the records, instead of participant's names to maintain confidentiality. All information and data used were held in the strictest confidence, only the researcher and her supervisors had access to it.

Privacy, respect and dignity of the patient were ensured at all times. At the orientation session all the participants were informed about the rules of the group which were observed at all group sessions.

The researcher ensured that there were no possible harmful consequences for the participants in the nurse-facilitated group sessions, the volunteer-led groups sessions nor the control group sessions. The possible risk of stirring up stressful feelings through the group discussions was considered by the researcher. If these situations had emerged the researcher planned to handle them as follows:

- 1) The researcher was trained and had the expertise as a psychiatric nurse to handle these problems
- 2) The participants were already diagnosed with depression and were attending the clinic for antidepressant treatment. It would have been useful to evaluate the effectiveness of interventions without medication, however this investigation would have been unethical.



Finally, if the researcher had not been able to deal with situations that arose she would have referred the participants to the psychiatrist at the clinic. In fact this was not needed. The study benefitted the participants in the 2 Experimental groups by lowering their levels of depression.

The results of the study will be placed in the Durban Institute of Technology Library and will be made available to the Department of Community Psychiatric Services, Professor Gordon and the participants.

### **3.12 Data Analysis**

The data from the scoring session was collected in numerical form for the purpose of assessing the magnitude and relationships between the variables (Pilot and Hungler, 1997). As stated, there were 3 groups of 15 participants each, 3 trials per group (2 interventions and a control group) and 15 observations per trial. The use of ordinal scales for this study made it inappropriate to apply parametric statistical tests for data analyses.

Parametric tests require larger samples and measurements on continuous scales. For this reason, non-parametric statistical tests were used for data analyses. Unpaired or independent groups were compared using the Kruskal Wallis test. The Kruskal Wallis test was used to compare groups 1, 2 and 3 with respect to each variable of interest. The Friedman test was used to test the individual scores within each group. (Intra-group). In each test the null hypothesis stated that there was no significant difference between groups 1, 2 and 3 with respect to the variable in charge, at the  $\alpha=0.05$  level of significance. The alternative hypothesis stated that there was a significant difference.

The significance of the main effects (groups and consultations), the significant difference between the 3 groups, the significant difference between the 3 trials and the presence or absence of a significant interaction effect between groups and consultations were tested.

In addition, summery statistical data analysis and graphic representation in the from of graphs were carried out. The statistical package, SPPSS version 5.0, was used for data entry and analyses (Norusis, 1992).

### **3.13 Limitations of the study**

There were 3 limitations of this study, namely:

- The use of the Rosenberg Self-esteem Scale

This scale was used to identify changes in self-esteem during and at the end of the interventions. However, it was later established that it is not sensitive to change over a short time and therefore it was not an appropriate measure to use. (See Section 3.7.3). It is therefore not possible to say whether the 2 interventions were effective in increasing the levels of self-esteem. Despite the interventions in both Experimental group 1 and Experimental; group 2, there were no changes revealed by the Rosenberg Self-esteem scores.

- The use of the Life-experience Survey Questionnaire

The researcher used this questionnaire to assess and explain whether the life-events that occurred to the members during the study had impacted on those members. If life-events had been experienced, it could have been argued that they were extraneous variables, and that the intervention alone was not responsible for the levels of depression and self-esteem that were measured at 6 and 12 weeks.

In fact, the scale was only useful for reporting the occurrence of life-events and whether or not they had a positive or negative impact, as perceived by the participants. Therefore, it was only a gross measure and it is not possible to precisely assess the effects of life-events on the levels of depression.

- The size of the Nurse-facilitated group intervention

This group consisted of 15 members. This was rather large to be facilitated by one person, as it limited the time available for each member to be heard. It would be beneficial to have

1 facilitator and 1 co-facilitator for this type of future group interventions.

### **3.14 Conclusion**

This chapter has described the research methodology, that guided the study. The research design, sampling, measurements, interventions, ethical issues and analyses of the data have been discussed. Apart from the limitations that have been mentioned, the methodology for this study was found to be appropriate and contributed to the success of the study.

## **CHAPTER FOUR**

### **ANALYSIS AND DISCUSSION OF FINDINGS**

#### **4.1 Introduction**

The purpose of this chapter is to present the analysis and findings in respect of the study objectives.

#### **4.2 Socio-demographic findings**

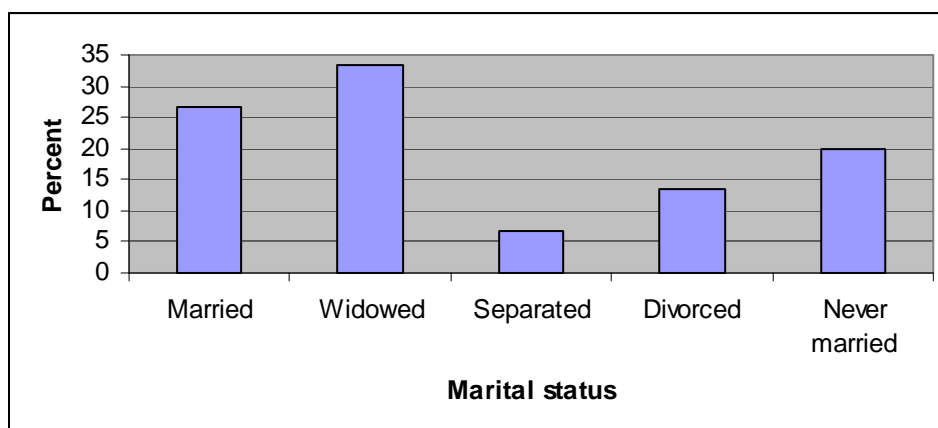
Socio-demographic information was required in this study, to establish that the participants in the sample had fulfilled the inclusion criteria (Section 3.6.3.1).

This included their ages and current use of antidepressant medications. In addition, details of their marital status, employment status and level of education were also collected to complete the Personal Profile Questionnaire. This has provided the background information of the participants. This information is presented in Tables 4.1, 4.2, 4.3, 4.4 and 4.5.

##### **4.2.1 Marital status**

The marital status of participants in the entire sample was varied. The Experimental group 1 (EG1) was the Nurse- facilitated cognitive group. The Experimental group 2 (EG2) was the Volunteer-led crafts group. The Control group (CG) was the group who had no intervention. This information is reflected in Table 4.1 and Figure 4.1. The majority were 'Married', 37.7 %, 20 % were 'Divorced', 13.33 % 'Never married' and only 8.88 % were 'Separated'. Nearly one-third (1/3) of the participants were 'Divorced' and 'Separated' and this corresponded with the effects of acculturation and the modern liberated women which contributed to depression, as discussed in Chapter Two, Section 2.1.4. Table 4.2 shows the marital status, within each group. In the EG1, the majority (60 %) were 'Married', and 33.33 % in the CG were 'Widowed'. Participants in the CG were dispersed across all the categories of marital status. The mode 'Married' was common to both the EG1 and EG2, whilst in the CG it was the category 'Widowed'.

**Figure 4.1: Bar graph depicting Marital status of whole sample**



**Table 4.2: Frequency tabulations for Marital status in respect of the three groups**

	Experimental Group 1		Experimental Group 2		Control Group	
Categories	N	%	N	%	N	%
Married	9	60.00	4	26.66	4	26.66
Widowed	1	6.66	3	20.00	5	33.33
Separated	0	0	3	20.00	1	6.66
Divorced	4	26.66	3	20.00	2	13.33
Never married	1	6.66	2	13.33	3	20.00
Total	15	100	15	100	15	100
Mode	Married		Married		Widowed	

Key: N refers to the number of participants per group

% refers to the percentage participation per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to non-intervention group

#### **4.2.2 Level of education**

The level of education of the participants, in the entire sample varied, as shown in Table 4.1 and Figure 4.2. The majority of the participants had attended ‘Secondary school’ (42.22 %) and ‘Primary school’ (42.22 %), whilst 11.11 % had ‘No formal education’ and 4.44 % had to completed Secondary school as well as secretarial and/or pre-school teacher training. None had attempted to obtain a ‘Diploma or Degree’.

It has been noted in Chapter Two, that having less than a high school education was a risk factor for depression (Barbee, 1992). It is possible that this was factor in this study considering that the majority of the sample did not have high school education.

Table 4.3, compares that the level of education in all three groups. In the EG1, 60 % had ‘Primary school education’, 13.33 % had additional education as well as ‘Secondary school education’. This was in contrast to EG2 and CG, who had mainly ‘Secondary school education’. All EG1 participants had some formal education. However, a small percentage in EG2 and CG had ‘No formal education’. The mode of the EG1 was the category ‘Primary school education’, whilst ‘Secondary school education’ was common for both the EG2 and CG.

**Table 4.3: Frequency tabulations for Level of education in respect of the three groups**

	<b>Experimental Group 1</b>		<b>Experimental Group 2</b>		<b>Control Group</b>	
<b>Categories</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>No formal education</b>	0	0	2	13.33	3	20.00
<b>Primary school (grade 1-7)</b>	9	60.00	6	40.00	4	26.66
<b>Secondary school (grade 8-12) only</b>	4	26.66	7	46.66	8	53.33
<b>Secondary school and other training</b>	2	13.33	0	0	0	0
<b>Diploma</b>	0	0	0	0	0	0
<b>Degree</b>	0	0	0	0	0	0
<b>Total</b>	15	100	15	100	15	100
<b>Mode</b>	Primary school education		Secondary school education		Secondary school education	

Key: N refers to the number of participants per group

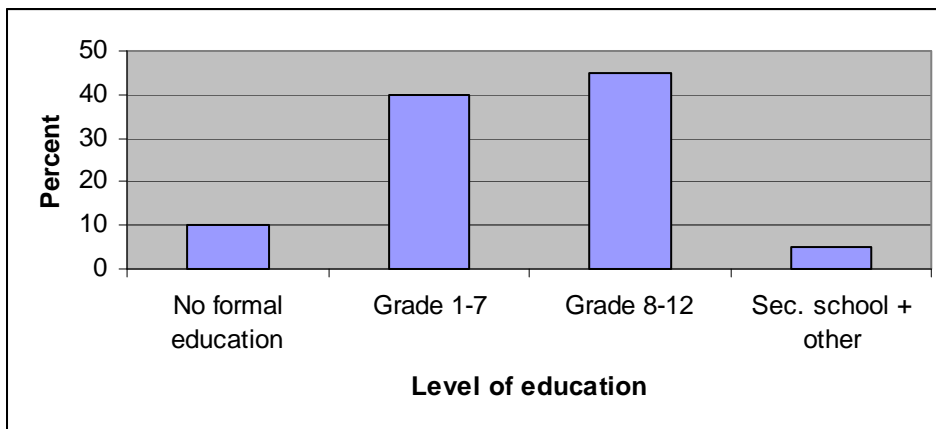
% refers to the percentage participation per category

Experimental group 1 is the nurse facilitated group intervention

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

**Figure 4.3: Bar graph depicting the level of education of the whole sample**



#### **4.2.3 Employment status**

The majority of the participants were 'Housewives' (95.55 %), whilst the remaining 4.44 % had 'Part-time jobs'. Bhana (1981) reported that the traditional Indian South African wife had no personal income, as her role was to take care of the home, children and husband. Therefore this study appears to be similar, as 95.55 % of the sample were housewives. There were no participants who were 'Students', 'Retired', 'Self Employed' or in 'Full-time formal employment'. This is shown in Table 4.1. Many of the participants indicated during the group sessions, that they were keen to obtain full-time work, as they had gross financial problems, but had great difficulty in obtaining work. The perceived reasons were their lack of skills and work opportunities as well as their lack of tertiary education.



It is possible that apathy and lack of motivation, which are key features of depression (DSMIV, 1994), might have contributed to some of their difficulties in finding work. See Chapter 2, Section 2.2.

Table 4.4 reflects the findings for the three groups. In both the EG1 and EG2, 100 % were ‘Unemployed’. However in the CG 86.7 % were ‘Unemployed’ and 23.3 % were in ‘Part-time-formal’ employment. The mode of ‘Unemployment’ was common to all three groups.

**Table 4.4: Frequency tabulations for Employment status in respect of the three groups**

	<b>Experimental Group 1</b>		<b>Experimental Group 2</b>		<b>Control Group</b>	
<b>Categories</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Unemployed</b>	15	100	15	100	13	86.66
<b>Retired</b>	0	0	0	0	0	0
<b>Students</b>	0	0	0	0	0	0
<b>Self-employed</b>	0	0	0	0	0	0
<b>Part-time formal</b>	0	0	0	0	2	13.33
<b>Full-time formal</b>	0	0	0	0	0	0
<b>Total</b>	15	100	15	100	15	100
<b>Mode</b>	Unemployed		Unemployed		Unemployed	

Key: N refers to the number of participants per group

% refers to the percentage participation per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

#### **4.2.4 Age categories**

The ages of the participants ranged from 25 years to 65 years, which was in accordance with the inclusion criteria (see Chapter Three, Section 3.6.3.1). The reasons for the exclusion of people below 25 years was that the youth would have different problems and emotions at this stage of their life, compared with the over 65 years old persons. The mean age of their entire sample was 45.84 years. The range was from 25 to 62 years. When age categories with intervals of 5 years were created, the mode was 46 to 50 years. Thirteen participants were in this age category. This accords with Pillay's findings (1988). Table 4.1 and Figure 4.3 indicate that the participants were spread over most of the age categories, which accords with studies that have shown that depression can occur at every age and affect individuals in their productive years of life (Weissman in Gordon, 1988, Nair and Allwood in Gagiano, 2001) as discussed in Chapter Two.

The mean age of the groups differed by no more than 2.3 years, which a small amount is considering the range of their ages. Therefore, the groups were similar in age. There were multiple modes in each group, with EG2 differing by more than 14 years from EG1 and CG. The medians in all three groups were similar. The maximum ages different by 4 years across the 3 groups. The minimum age was the same for EG1 and CG but different by 6 years from the EG2.

**Table 4.5: Frequency tabulations for Age in respect of the three groups**

<b>Age Group</b>	<b>Experimental Group 1</b>		<b>Experimental Group 2</b>		<b>Control Group</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>25-30</b>	0	0	1	6.66	0	0
<b>31-35</b>	3	20.00	2	13.33	1	6.66
<b>36-40</b>	2	13.33	0	0	2	13.33
<b>41-45</b>	2	13.33	2	13.33	3	20.00
<b>46-50</b>	5	43.33	5	43.33	3	20.00
<b>51-55</b>	2	13.33	2	13.33	5	43.33
<b>56-60</b>	1	6.66	2	13.33	1	6.66
<b>61-65</b>	0	0	1	6.66	0	0
<b>Total</b>	15	100	15	100	15	100
<b>Mean</b>	44.7		47.2		45.6	
<b>Median</b>	46.0		49.0		47.0	
<b>Mode</b>	34*		48*		31*	
<b>Range</b>	29		37		27	
<b>Minimum</b>	31		25		31	
<b>Maximum</b>	60		62		58	

\* Indicated multiple modes exist. The smallest value is shown.

Key: N refers to the number of participants per group

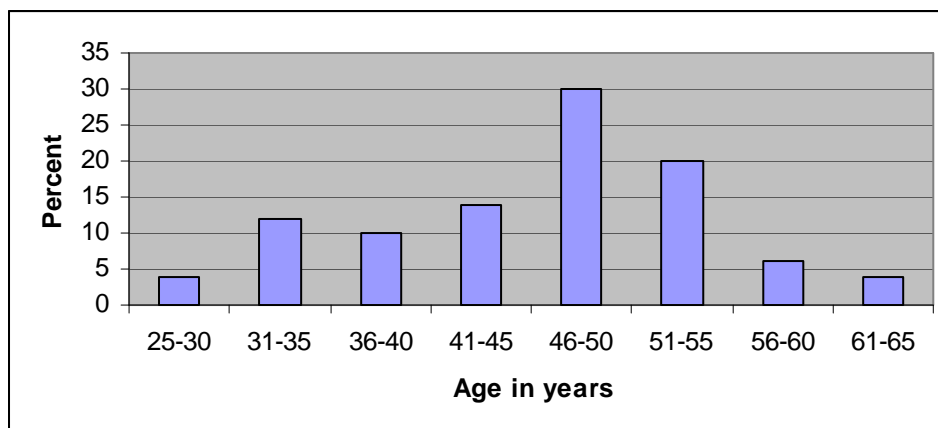
% refers to the percentage participation per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

**Figure 4.3: Bar chart of age groups of the whole sample**



#### **4.2.5 Duration of the use of antidepressants**

The participants had to use antidepressant medication for the past three months at the time of commencing the study, in order to be included in this study (Chapter Three).

The observation that prompted this study was the use of antidepressant medications as the primary form of treatment and the long-term use of these medications by the study population. The participants had been on antidepressant medication for a minimum period of 3 months and to a maximum of 18 years and 6 months. Table 4.1 shows the distribution across time categories. Four participants had used medication for 0-6 months and three participants for 17-18 years. The mean time period that the participants had used antidepressant medication was 72.22 months (6 years), and the mode was 3 to 4 years, with 22 participants having used antidepressant medication for this period.

In respect of the three groups, the participants of EG1 had used medication for a maximum of 10 years to a maximum of 6 months. In the EG2, 20 % of the participants had used medication for more than 17 years, whilst in the CG 13.33 % had used medication for more than 13 years.

This was a long period to be on antidepressant medication, as was observed in the preliminary study (as discussed in the background to the study in Chapter One, Section 1.2). The duration of use of antidepressant medication in the EG2 was longer, in comparison to the other groups. The varying duration of the use of antidepressants amongst the sample is similar to that reported in the literature (Okasha, 1998; McGillivray and Reid, 2001). Some individuals require medication for short periods of time and others for longer periods, to prevent relapse and assist with maintenance of mental well-being (National Institute of Mental Health, 2001). There were multiple modes in the EG2 and CG.

**Table 4.6: Frequency tabulations for the duration of usage of antidepressants medication in respect of the three groups.**

PERIOD	Experimental Group 1		Experimental Group 2		Control Group	
	N	%	N	%	N	%
<b>0-6 months</b>	2	13.33	2	13.33	0	0
<b>7-11 months</b>	1	6.66	1	6.66	2	13.33
<b>1-2 years</b>	1	6.66	2	13.33	3	20.00
<b>3-4 years</b>	4	26.66	3	20.00	3	20.00
<b>5-6 years</b>	1	6.66	0	0	1	6.66
<b>7-8 years</b>	5	33.33	1	6.66	1	6.66
<b>9-10 years</b>	1	6.66	2	13.33	1	6.66
<b>11-12 years</b>	0	0	0	0	2	13.33
<b>13-14 years</b>	0	0	1	6.66	2	13.33
<b>15-16 years</b>	0	0	0	0	0	0
<b>17-18 years</b>	0	0	3	20.00	0	0
<b>Total</b>	15	100	15	100	15	100
<b>Mode</b>	7-8 years		3-4 years and 17-18 years		1-2 years and 3-4 years	

Key: N refers to the number of participants per group

% refers to the percentage participation per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

#### 4.2.6 Antidepressant used

The antidepressants that were used by the whole sample are listed in Table 4.7. The majority were using Amitriptyline and a small minority (2 %) Lorien. The most commonly used class of medication was the Tricyclics. All of the types of antidepressants that were being used appear on the Department of Health's Essential Drugs List (1998) for the ordering of psychiatric medications.

**Table 4.7: Tabulation of the Antidepressant medication used by the whole sample**

<b>Class</b>	<b>Generic</b>	<b>Brand name</b>	<b>N</b>	<b>%</b>
<b>Tricyclic (TCA)</b>	Lofepamine	Emdalen	12	26.66
	Amitriptyline	Tryptanol Trepelene	15	33.33
	Imipramine	Tofranil Ethipramine	6	13.33
<b>Tetracyclic (TCA)</b>	Mianserin	Lantanon	11	24.44
<b>Selective Serotonin Reuptake Inhibitors (SSRI)</b>	Fluoxetine	Prozac Lorien	1	6.66
<b>Total</b>			45	100

Key:

N refers to the number of participants per medication

% refers to the percentage participation per category

Table 4.8 below, shows the antidepressants used by the three groups. Over 66 % of the participants in all three groups used prescribed Tricyclic antidepressants. Tetracyclics was used in the EG1 (33.33 %), EG2 (26.66 %) and the CG (13.33 %). It is specifically used for cardiac patients. Prozac was prescribed to only one patient. This medication is expensive and not readily available in state clinics.

**Table 4.8: Tabulation of the antidepressants used in respect of the three groups**

Antidepressants	Experimental Group 1		Experimental Group 2		Control Group	
	N	%	N	%	N	%
<b>Tricyclics (TCA)</b>	10	66.76	10	66.76	13	86.76
<b>Tetracyclics (TCA)</b>	5	33.33	4	26.66	2	13.33
<b>Selective Serotonin-Reuptake-Inhibitors (SSRI)</b>	0	0	1	06.66	0	0
<b>Total</b>	15	100	15	100	15	100

Key: N refers to the number of participants

% refers to the percentage participation per category

#### **4.2.7 Conclusion**

All the members met the Inclusion criteria. There were no major differences between the groups. Marital status was spread across all five categories in the three groups. Only two members who were part of the CG group were in part-time employment, the remaining 43 were unemployed.



The level of education varied in all three groups, whilst two member had Secondary and other training. Medication was commonly used for 3-4 years in all three groups.

### **4.3 The effectiveness of the interventions of the three groups, at the three scoring sessions, in terms of the levels of depression**

#### **4.3.1 Introduction**

The Beck Depression Inventory Scale (1978) was used to measure the levels of depression.

The scores reflect the intensity of the depressive symptoms and were interpreted as follow:

- 0-9 no depression
- 10-15 mild depression
- 16-19 mild to moderate depression
- 20-29 moderate to severe depression
- and a score of 30 or more signified severe depression

(McDowell and Newell, 1996: 245).

The scores for the participants in the three groups were measured at the three consultations to determine their progress.

An improvement in the levels of their depression was denoted by a reduction in their BDI scores. The Initial scoring was at the Pre-test, the second scoring was at Post-test 1 (after six weeks), and the third scoring was at Post- test 2 (after 12 weeks). Testing was done in order to obtain a result of the first, second and third objectives of the research, which was to evaluate and compare the effectiveness of the Nurse-facilitated cognitive group intervention and the Volunteer-led group interventions as adjunctive treatment to antidepressant treatment on mild to moderately depressed Indian women in terms of levels of depression over a fixed period of time and in comparison to the Control group (no intervention).

### 4.3.2 Descriptive statistics

#### 4.3.2.1 Beck Depression Inventory scores at Pre-test of the whole sample

The BDI scores for the entire sample are shown in Table 4.9. In the entire sample the mean was 22.04, the median 22, the mode was 17 and 28, and the range was 13, with the minimum being 15 and the maximum 28. It should be noted that the minimum score was 15 and the maximum was 28. This indicates that the sample was correctly selected in terms of the selection criteria. The participants had scores of no less than 9 and no more than 29, indicating mild to moderate depression.

**Table 4.9: Frequency tabulation of the BDI scores at the Pre-test of the whole sample**

<b>Pre- test</b>	<b>BDI Scores</b>
<b>Mean</b>	22.04
<b>Median</b>	22
<b>Mode</b>	17.28
<b>Minimum</b>	15
<b>Maximum</b>	28
<b>Range</b>	13

#### 4.3.2.2 Beck Depression Inventory scores at Pre- test of the three groups

Table 4.10 shows the BDI scores for the three groups at the Pre- test (Initial scoring).

The mean and the median BDI scores for the three groups differed by no more than 2.8 points. There were multiple modes for each group with 17 points being the smallest for that of EG1 and CG, whereas in the EG2 the smallest was 24 points. The range and minimum scores differed by no more than 2 points in all groups. The maximum BDI scores of all three groups were 28 points, which represented moderate to severe depression.

A comparison of the mean BDI scores for each group at the three scoring sessions is discussed in Section 4.3.2.4.

**Table 4.10: Frequency tabulations for the Beck Depression Inventory score of the three groups at Pre- test**

	<b>Experimental Group 1</b>		<b>Experimental Group 2</b>		<b>Control Group</b>	
<b>Categories</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>6-7</b>	0	0	0	0	0	0
<b>8-9</b>	0	0	0	0	0	0
<b>10-11</b>	0	0	0	0	0	0
<b>12-13</b>	0	0	0	0	0	0
<b>14-15</b>	1	6.66	0	0	1	6.66
<b>16-17</b>	3	20.00	1	6.66	4	26.66
<b>18-19</b>	1	6.66	1	6.66	2	13.33
<b>20-21</b>	3	20.00	2	13.33	2	13.33
<b>22-23</b>	0	0	4	26.66	3	20.00
<b>24-25</b>	0	0	4	26.66	2	13.33
<b>26-27</b>	4	26.66	0	0	0	0
<b>28-29</b>	3	20.00	3	20.00	1	6.66
<b>Total</b>	15		15		15	
<b>Mean</b>	22.4		23.2		20.4	
<b>Median</b>	21		23		21	
<b>Mode</b>	17*		24*		17*	
<b>Range</b>	13		11		13	
<b>Minimum</b>	15		17		15	
<b>Maximum</b>	28		28		28	

\*Multiple modes exist. The smallest value is shown.

Key: N refers to the number of participants per group

% refers to the percentage participation per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

#### **4.3.2.3 Beck Depression Inventory scores at Post-test 1 of the whole sample**

When the entire sample was retested after six weeks, the BDI scores shown in Table 4.11 were obtained. The Control group had no interventions. The Experimental group 1 and the Experimental group 2 had received six weeks of Nurse-facilitated cognitive group sessions and six weeks of Volunteer-led crafts group sessions respectively. The mean was 19.15, the median 20, the mode 17, the minimum 8, the maximum 28 and the range was 20. The minimum BDI score was reduced by seven points compared with the Pre-testing result. It reflected that some of the participants had no depression as interpreted by their BDI scores, whilst others remained at the maximum of 28 points.

**Table 4.11: Frequency tabulations of the BDI scores of the whole sample at Post-test 1**

<b>Post-test 1</b>	<b>BDI Scores</b>
<b>Mean</b>	19.15
<b>Median</b>	20
<b>Mode</b>	17
<b>Minimum</b>	8
<b>Maximum</b>	28
<b>Range</b>	20

#### **4.3.2.4 BDI scores of the three groups at Post-test 1**

Table 4.12 reflects the scores of the three groups. There were changes in the scores. In the EG1 and the EG2, the maximum scores were 25 and 23 respectively, which was a reduction from the scores of 28. In the Control group the maximum remained at 28. The BDI scores were compared with that of the Pre-test. The EG1 scores of the BDI were 8 to 9, which reflected no depression (0-9). The EG2 was 11 which was mild to moderate depression (10-15), which was a good result. The CG was 16 to 17 (mild to moderate depression). This showed that some changes occurred following the interventions. The mean and median scores of the three groups differed by no more than 3 points. The smallest value of the mode was 17, and it differed by no more than 7 from EG2. The range of the BDI scores differed by no more than 3 points amongst the three groups.

#### **4.3.2.5 BDI scores of the whole sample at Post-test 2**

The BDI scores for the entire sample after 12 weeks is shown in Table 4.13. The mean level of depression for the whole sample had improved since the Post-test 1 by 2.62 points.

**Table 4.12: Frequency tabulation of the Beck Depression Inventory scores of the three groups at Post-test 1**

	<b>Experimental Group 1</b>		<b>Experimental Group 2</b>		<b>Control Group</b>	
<b>Categories</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>6-7</b>	0	0	0	0	0	0
<b>8-9</b>	1	6.66	0	0	0	0
<b>10-11</b>	0	0	1	6.66	0	0
<b>12-13</b>	2	13.33	1	6.66	0	0
<b>14-15</b>	2	13.33	0	0	0	0
<b>16-17</b>	3	20.00	3	20.00	4	26.66
<b>18-19</b>	2	13.33	1	6.66	1	6.66
<b>20-21</b>	0	0	5	33.33	4	26.66
<b>22-23</b>	1	6.66	4	26.66	3	20.00
<b>24-25</b>	4	26.66	0	0	2	13.33
<b>26-27</b>	0	0	0	0	0	0
<b>28-29</b>	0	0	0	0	1	6.66
<b>Total</b>	15		15		15	
<b>Mean</b>	17.9		18.8		20.7	
<b>Median</b>	17		20		20	
<b>Mode</b>	17*		20*		17*	
<b>Range</b>	17		12		11	
<b>Minimum</b>	8		11		17	
<b>Maximum</b>	25		23		28	

\* Multiple modes exist. The smallest value is shown.

Key: N refers to the number of participants per group

% refers to the percentage participants per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

**Table 4.13: Frequency tabulation of the BDI scores at Post-test 2 of the whole sample**

<b>Post-test 2</b>	<b>BDI scores</b>
<b>Mean</b>	16.53
<b>Median</b>	18
<b>Mode</b>	14
<b>Minimum</b>	6
<b>Maximum</b>	28
<b>Range</b>	22

#### **4.3.2.6 BDI scores of the three groups at Post-test 2**

The scores for the three separate groups are shown in Table 4.14. The BDI scores were reduced considerably in Post-test 2, following the group intervention in Experimental group 1 and Experimental group 2. This showed a reduction in the BDI scores of the participants.

The mean BDI in the Post-test 2 was not more than 20 points, and different by not more than 8 points amongst the three groups. The median was 14, which was the same for the Experimental Group 1 and Experimental group 2, but differed by 6 points from the Control group. There were multi-modal scores, with the smallest value being 10. The minimum BDI scores differed by not more than 9 points from each group. The maximum BDI scores was 28, and it differed by no more than 8 points from each group.

**Table 4.14: Frequency tabulations for the Beck Depression Inventory scored of the three groups at Post-test 2**

	<b>Experimental Group 1</b>		<b>Experimental Group 2</b>		<b>Control Group</b>	
<b>Categories</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>6-7</b>	1	6.66	0	0	0	0
<b>8-9</b>	1	6.66	1	6.66	0	0
<b>10-11</b>	2	13.33	4	26.66	0	0
<b>12-13</b>	0	0	2	13.33	0	0
<b>14-15</b>	6	40.00	4	26.66	0	0
<b>16-17</b>	0	0	0	0	2	13.33
<b>18-19</b>	3	20.00	2	13.33	4	26.66
<b>20-21</b>	2	13.33	1	6.66	4	26.66
<b>22-23</b>	0	0	1	6.66	1	6.66
<b>24-25</b>	0	0	0	0	2	13.33
<b>26-27</b>	0	0	0	0	1	13.33
<b>28-29</b>	0	0	0	0	1	6.66
<b>Total</b>	15		15		15	
<b>Mean</b>	14.6		13.9		21	
<b>Median</b>	14		14		20	
<b>Mode</b>	14*		10*		19*	
<b>Range</b>	15		13		11	
<b>Minimum</b>	6		9		17	
<b>Maximum</b>	21		22		28	

\* Indicates that multiple modes exist the smallest value is shown



Key: N refers to the number of participants per group

% refers to the percentage participants per category

Experimental group 1 refers to the group intervention facilitated by the nurse

Experimental group 2 refers to the group intervention led by the volunteer

Control group refers to the non-intervention group

#### **4.3.2.7 Mean BDI scores for the three groups at the three scoring sessions**

Table 4.15, shows the comparison of the mean BDI scores at the Pre-test, Post-test 1 and Post-test 2 scoring sessions. There was a difference of 2.8 points between the EG1, EG2 and CG, BDI mean scores at Pre-test level. At Post-test 2, the mean BDI score difference amongst the three groups was 2.7 points. At Post-test 2, the mean BDI scores were further reduced with a difference of 7.1 points amongst the three groups. The mean BDI scores of the Control group at Pre-test, Post-test 1 and Post-test 2 had reduced by 0.6 points, whilst that of the EG1 was 7.8 points and the EG2 by 9.3 points.

In the overall scores, the mean BDI scores were slightly better in the Experimental group 2 in comparison to the other two groups. Experimental group 1 and Experimental group 2's scores indicated an improvement in the depressive levels by the reduction in the BDI scores. This may be attributed to the Nurse-facilitated cognitive group and the Volunteer-led craft group intervention, which was introduced to the group members of the Experimental group 1 and Experimental group 2 respectively.

**Table 4.15: Frequency tabulations for the mean Beck Depression Inventory scores for the three groups at the three scoring sessions**

Mean BDI scores						
	Exp. Group 1	Diff. in scores	Exp. Group 2	Diff. in scores	Control Group	Diff. in scores
<b>Consultation</b>						
<b>Pre-test</b>	22.4		23.2		20.2	2.8
<b>Post-test 1</b>	17.9	4.5	18.8	4.4	20.7	2.7
<b>Post-test 2</b>	14.6	3.3	13.9	4.9	21	7.1
<b>Total reduction in scores</b>		7.8		9.3	0.6	

Key: Exp. refers to Experimental      Diff. refers to Difference

### 4.3.3 Inferential statistics

#### 4.3.3.1 Intergroup comparisons of BDI scores

The Kruskal Wallis test was conducted in an attempt to establish the relatedness or independence between the two group interventions and the Control group, as measured at each scoring session. This test was considered appropriate to test for significant differences in the Beck Depression Inventory (BDI) scores. The null hypothesis for the level of depression variable, stated that there was no significant difference between the Nurse-facilitated-cognitive-intervention-group, the Experimental group 2 (Volunteer-led crafts group intervention) and the Control group, at the  $p=0.05$  level of significance. The alternative hypothesis stated there was a significant difference between the three groups, with respect to the variable in charge at the  $p=0.05$  level of significance.

The Beck Depression Inventory scale was compared at Pre-test (initial), at Post-test 1 (after six weeks) and at every consultation. The comparison of the three groups at Post-test 2 (after 12 weeks) is described below.

#### **4.3.3.2 Comparison of the Pre-test scores of the three groups using the Beck Depression Inventory**

The mean ranks of the initial BDI scores, of the three groups at the initial scoring is shown in Table 4.16. The score of all three groups were different at the initial stage of the testing. In making a comparison, the BDI scores of the members of the Control group were least depressed (17.87), followed by the Nurse-facilitated cognitive group (23.83) slightly more depressed and the Volunteer-led crafts group (27.30) were most depressed.

**Table 4.16: Frequency tabulation of the mean ranks of the scores of the three groups at Pre-test, using the Beck Depression Inventory scale**

<b>Group</b>	<b>N</b>	<b>Mean Ranks</b>
<b>Nurse-facilitated group</b>	15	23.83
<b>Volunteer-led group</b>	15	27.30
<b>Control group</b>	15	17.87
<b>Total</b>	45	

Key: N refers to the number of participants

When the Initial Beck Depression Inventory scores for the three groups were compared at Pre-test, the result of the Kruskal Wallis test was  $p=0.135$ . This was greater than  $p=0.05$ . The BDI scores did not significantly differ between the groups, and therefore the null hypothesis was accepted. This was regarded as a good result in that researcher intended that the groups be similar, before the implementation of the interventions.

This confirms the similarity of the scores in terms of the findings of the descriptive statistical analysis Chapter Four, Section 4.3.2.

#### **4.3.3.3 Comparison of the Post-test 1 scores of the three groups using the Beck Depression Inventory**

Table 4.17 shows the mean rank of each group after six weeks of group interventions, using the Beck Depression Inventory (BDI) scale. The mean rank scores of the three groups after six weeks of intervention, and standard treatment showed both a reduction and an increase in the BDI scores. There was a decrease in the BDI levels of both the Nurse-facilitated and Volunteer-led groups, and an increase in the levels of depression in the Control group. The Control group received ‘Standard treatment’ only, which consisted of antidepressant medication and monthly interview by the nurse or doctor.

**Table 4.17: Frequency tabulation of the mean ranks of the three groups at Post-test 1, using the Beck Depression Inventory scale**

<b>Group</b>	<b>N</b>	<b>Mean Rank</b>
<b>Nurse-facilitated group</b>	15	20.00
<b>Volunteer-led group</b>	15	21.80
<b>Control group</b>	15	27.20
<b>Total</b>	45	

Key: N refer to the number of participants

Nurse-facilitated cognitive group and Volunteer-led crafts group interventions were introduced to the Experimental 1 and Experimental 2 groups respectively, with the Control group receiving standard treatment only. The Kruskal Wallis test was used to test for the significant differences in the Beck Depression Inventory scores of the three groups at six weeks (Post-test 1). The result was  $p=0.291$ .

Since  $p$  was greater than 0.05, this result indicated that there were no significant differences between the levels of depression between the three groups, despite the interventions. Therefore the null hypothesis was rejected.

#### **4.3.3.4 Comparison of the Post-test 2 scores of the three groups, using the Beck Depression Inventory**

Table 4.18, shows the mean rank of each group after 12 weeks of group interventions and standard treatment, using the Becks Depression Inventory (BDI) scale. The BDI scores for the members who received Nurse-facilitated cognitive group and Volunteer-led crafts group interventions respectively, showed a considerable reduction in their levels of depression, whilst the Control group members had an increase in their levels of depression.

**Table 4.18: Frequency tabulations of the mean rank of the Post-test 1 Beck scores of all three groups at Post-test 2, using the Beck Depression Inventory scale**

<b>Group</b>	<b>N</b>	<b>Mean Rank</b>
<b>Nurse-facilitated group</b>	15	18.47
<b>Volunteer-led group</b>	15	15.97
<b>Control group</b>	15	34.57
<b>Total</b>	45	

Key: N refers to the number of participants

After 12 weeks (Post-test 2) of group interventions on the two Experimental groups and standard treatment for the Control group, the BDI scores were tested for relatedness using Kruskal Wallis test. The result was  $p=0.00$ . Since  $p$  was less than 0.05, the results indicated that there was a statistically significant difference, between the groups with respect to the BDI scores. Therefore the alternative hypothesis was accepted.

This result was regarded as a positive result, as it demonstrated a significant reduction in the depression levels, following the group interventions. The scores for the Control group remained unchanged.

#### **4.3.4 Intergroup comparisons of the BDI scores**

The Friedman test was conducted in an attempt to establish if there were any significant differences in the BDI scores within each group. The null hypothesis for the level of depression variable, stated that there was no significant difference, within the Experimental group 1 (NFG), Experimental group 2 (VLG) and the Control (CG) during the Pre-test, Post-test 1 and Post-test 2 scoring sessions, at the  $p=0.05$  level of significance. The alternative hypothesis stated that there was a significant difference within each group at Pre-test, Post-test 1 and Post-test 2 in the variable with respect to the variable in charge at the  $p=0.05$  level of significance.

##### **4.3.4.1 Comparison of the mean rank BDI scores within the Experimental group 1**

The mean ranks of the Experimental group 1 (Nurse-facilitated-cognitive group) scores at the three scoring sessions are seen in Table 4.19. The mean rank Pre-test BDI score was higher than the Post-test 1 and Post-test 2 score.

**Table 4.19: Frequency tabulations of the mean ranks of the BDI scores of the Experimental group 1 at the three scoring sessions**

<b>Experimental group 1 (BDI scores)</b>	<b>Mean Rank</b>
<b>Pre-test</b>	3.00
<b>Post-test 1</b>	2.00
<b>Post-test 2</b>	1.00

When the BDI scores of each member within the Experimental group 1 were compared, the result of the Friedman test was  $p=0.000$ . This was less than  $p=0.05$ .

Therefore the BDI scores was statistically significant within the group, and thus the alternative hypothesis was accepted.

#### **4.3.4.1.1 Conclusion**

There was a statistically significant change during the study and the BDI scores improved at the end of the intervention in all the participants.

#### **4.3.4.2 Comparison of the BDI scores within the Experimental group 2**

Table 4.20 shows the mean ranks of the BDI scores within the Experimental group 2 at the three scoring sessions. The mean rank BDI was less at the Post-test 2 (1.03) than at the Pre-test (2.97). This indicated that there was a progressive improvement in BDI levels of members, and this could be due to the introduction of group interventions.

**Table 4.20: Frequency tabulation of the mean rank of the BDI scores within the Experimental group 2**

<b>Experimental group 2 (BDI scores)</b>	<b>Mean Rank</b>
<b>Pre-test</b>	2.97
<b>Post-test 1</b>	2.00
<b>Post-test 2</b>	1.03

When the Friedman test was used to analyse the BDI scores within the group, the result was  $p=0.000$ . This result was less than  $p=0.05$ . Therefore the BDI scores differed significantly within the group, thus the null hypothesis was accepted.

#### **4.3.4.2.1 Conclusion**

There was a statistically significant change during the study, BDI's improved across the group and all were better at the end.

#### **4.3.4.3 Comparison of the BDI scores within the Control group**

Table 4.21 shows the mean rank of the BDI scores within the Control group. The mean rank score for the Pre-test (1.87) was lower than at Post-test 1 and 2 (2.00 and 2.13).

**Table 4.2.1: Frequency tabulation of the mean rank of the BDI scores of the Control group**

<b>Control group 1 (BDI scores)</b>	<b>Mean Rank</b>
<b>Pre-test</b>	1.87
<b>Post-test 1</b>	2.00
<b>Post-test 2</b>	2.13

However, when the BDI scores were analysed using the Friedman test, the result was  $p=0.597$ . This result was greater than  $p=0.05$ . This was not a statistically significant result. Therefore the null hypothesis, which stated that there was no difference between the scores of the group members, was accepted.

#### **4.3.4.3.1 Conclusion**

The result was good as it showed that unlike the participants in the intervention group, there was no improvement in the levels of depression in the Control group.

#### **4.3.5 Conclusion**

There was a statistically significant difference in the BDI scores, between and within the three groups by the end of the study.



The levels of depression improved in the two Experimental groups following the group interventions, unlike the Control group which showed no improvement.

#### **4.4 The effectiveness of the interventions in terms of the self-esteem levels**

##### **4.4.1 Introduction**

The Rosenberg Self-esteem Scale (1965) was used to measure whether there were any changes in the level of the self-esteem of the participants in relation to the introduction of the interventions. Testing was done in order to obtain a result for the first, second, third and fourth objectives of the research, which was to evaluate and compare the effectiveness of the Nurse-facilitated group intervention on mild to moderately depressed Indian women in comparison to the Control group in terms of levels of self-esteem over a fixed period of time.

##### **4.4.2 Descriptive Statistics**

###### **4.4.2.1 RSE scores at Pre-test for the whole sample**

The Rosenberg Self-esteem Scale (1965) scores for the entire sample are shown in Table 4.22. It is clear that the majority (55.55 %) had a high self-esteem, but a large portion (33.33 %) had a low self-esteem.

**Table 4.22: Frequency tabulation of the Rosenberg Self-esteem scores at Pre-test of the whole sample**

<b>Self-esteem scores at Pre-test</b>	<b>N</b>	<b>%</b>
<b>Low</b>	15	33.33
<b>Neither high or low</b>	5	11.11
<b>High</b>	25	55.55
<b>Total</b>	45	100

#### 4.4.2.2 RSE scores at Pre-test for the three groups

Table 4.23 shows the RSE scores of the three separate groups at Pre-test. The RSE scores of the participants in the Experimental group 1 had shown high self-esteem (80 %), compared with 53.33 % in the Experimental group 2 and 33 % in the Control group respectively. In the category “neither high or low self-esteem”, there was no participants from the Experimental group 1, 20 % in the Experimental group 2 and 27% in the Control group. The Experimental group 2 and the Control group scored a lower self-esteem compared to the Experimental group 1. As many as 80 % of the participants scored high self-esteem column-wise in the Experimental group 1 in contrast to 80 % of the Control group who scored neither high nor low self-esteem.

**Table 4.23: Frequency tabulation of Rosenberg Self-Esteem scores at Pre-test for the three groups**

Self-esteem Levels	Experimental Group 1 (NFG)			Experimental Group 2 (VLG)			Control Group (CG)			Total N	Total %
	N	C%	R%	N	C%	R%	N	C%	R%		
Low	3	20.00	20.00	6	40.00	40.00	6	40.00	40.00	15	100
Neither High or Low	0	0	0	1	06.66	20.00	4	27.00	80.00	5	100
High	12	80.00	48.00	8	53.33	32.00	5	33.00	20.00	25	100
Total	15	100		15	100		15	100		45	

Key: C % refers to Column-wise percent

R % refers to Row-wise percent

N refers to the number of participants

Total % refers to the total percentage

#### 4.4.2.3 RSE scores at Post-test 1 for the whole sample

The Rosenberg scores for the whole sample are shown in Table 4.24. The majority of the participants scored a high self-esteem.

**Table 4.24: Frequency of tabulations of the Rosenberg Self-esteem scores at Pre-test 1 of the whole sample**

Self-esteem levels at Post-test 1	N	%
Low	9	21.00
Neither high or low	14	31.00
High	22	48.00
Total	45	100

#### 4.4.2.4 RSE of the three groups at Post-test 1

Table 4.25 reflects the findings of Rosenberg self-esteem scores (RSE) scores of the three separate groups after 6 weeks. The participants in the Experimental group 1 generally scored a higher self-esteem score in comparison to the participants in the Experimental group 2 and the Control group. Column-wise, high self-esteem was predominant in the Experimental group 1 and Experimental group 2 Row-wise. The category ‘neither high or low’ self-esteem was greater in the Control group than the other two groups. Low self-esteem was generally higher row-wise in the Experimental group 2 than the other two groups. These RSE scores of the whole sample in the Post-test 1 did not differ considerably from those found in the Pre-test.

**Table 4.25: Frequency tabulation of the Rosenberg Self-esteem scores at Post-test 1 for the three groups**

Self-esteem Levels	Experimental Group 1 (NFG)			Experimental Group 2 (VLG)			Control Group (CG)			Total N	Total %
	N	C%	R%	N	C%	R%	N	C%	R%		
<b>Low</b>	1	06.76	11.11	5	33.33	56.55	3	20.00	33.33	9	100
<b>Neither High or Low</b>	5	33.33	36.00	2	13.33	14.28	7	46.76	50.00	14	100
<b>High</b>	9	60.00	41.00	8	53.43	36.36	5	33.33	27.22	22	100
<b>Total</b>	15	100		15	100		15	100		45	

Key: C % refers to Column-wise percent

R % refers to Row-wise percent

N refers to the number of participants

Total % refers to the total percentage

#### **4.4.2.5 RSE scores at Pre-test 2 of the whole sample**

The Rosenberg Self-esteem scores for the entire sample after 12 weeks are shown in Table 4.26. Once again, high self-esteem was indicated for most of the participants in the whole sample.

**Table 4.26: Frequency tabulations of the Rosenberg Self-esteem scores at Post-test 2**

Self-esteem levels at Post-test 2	N	%
<b>Low</b>	15	33.33
<b>Neither high or low</b>	9	20.00
<b>High</b>	21	47.66
<b>Total</b>	45	100

#### 4.4.2.6 RSE scores at Post-test of the three groups

Table 4.27 shows the results of the RSE scores of the three groups after 12 weeks from the beginning of the study. Column-wise, the majority of the participant in the Experimental group 1 scored higher self-esteem (66.6 %). Most (46.66 %) of these participants who showed a low self-esteem score were in the Experimental group 2. In the Control group, the greatest number (44.44 %) scored neither low or high self-esteem (row-wise). Generally there was a little variation in the RSE scores of the participants from Pre-test 1 to Post-test 1 and Post-test 2.

**Table 4.27: Frequency tabulations for the Rosenberg Self-esteem scores at Post-test 2 of the three groups**

Self-esteem Levels	Experimental Group 1 (NFG)			Experimental Group 2 (VLG)			Control Group (CG)			Total N	Total %
	N	C%	R%	N	C%	R%	N	C%	R%		
<b>Low</b>	2	13.33	13.33	7	47.66	47.66	6	40.00	40.00	15	100
<b>Neither High or Low</b>	3	20.00	33.33	2	13.33	22.22	4	27.66	44.44	9	100
<b>High</b>	10	67.66	47.61	6	40.00	28.57	5	33.33	23.80	21	100
<b>Total</b>	15	100		15	100		15	100		45	

Key: C % refers to Column-wise percent

R % refers to Row-wise percent

N refers to the total number of participants

Total % refers to the total percentage

#### **4.4.3 Inferential Statistics**

##### **4.4.3.1 Intergroup comparison of RSE scores**

The Kruskal Wallis test was used to test for possible differences or relatedness between the three groups as measured at each scoring session. As stated earlier, the Rosenberg Self-esteem Scale (RSE) 1965 was used to measure any improvement in the self-esteem levels. The null hypothesis stated that there was no significant differences between the self-esteem scores of the three groups, at the  $p=0.05$  level of significance.

The alternative hypothesis stated that there was a significant difference between the three group, at  $p=0.05$  level of significance.

##### **4.4.3.2 Comparison of the Pre-test scores of the three groups using the Rosenberg Self-esteem Scale**

The Rosenberg scores of the three groups, at the Pre-test scoring sessions are shown in Table 4.28. The mean rank Rosenberg self-esteem scores of the Nurse-facilitated cognitive group was higher than that of the Volunteer-led crafts group and the Control group.

**Table 4.28: Frequency tabulations of the mean rank of the Rosenberg Self-esteem scores at Pre-test for the three groups**

<b>Group</b>	<b>N</b>	<b>Mean Rank</b>
<b>Nurse-facilitated group (EG1)</b>	15	29.10
<b>Volunteer-led group (EG2)</b>	15	21.60
<b>Control group (CG)</b>	15	18.30
<b>Total</b>	45	

When Rosenberg self-esteem (RSE) scores of the three groups were compared, using the Kruskal Wallis test, the results was  $p=0.039$ . Since this was less than  $p=0.05$ , it indicated that the scores of the three groups were statistically different, therefore the null hypothesis was rejected.

#### **4.4.3.2.1 Conclusion**

This was not regarded as a good result as the researchers had intended that the group be similar at the start of the study.

#### **4.4.3.3 Comparison of the Post-test 1 scores for the three groups, using the Rosenberg Self-esteem Scale**

Table 4.29, shows the mean rank of the Rosenberg Self-esteem scores (RSE) of the three groups after six weeks of group interventions. The mean rank self-esteem scores of the Experimental group 1 remained higher than those of the Experimental group 2 and the Control group.

**Table 4.29: Frequency tabulations of the mean rank of the Rosenberg Self-esteem scores at Post-test 1 of the three groups**

<b>Group</b>	<b>N</b>	<b>Mean Rank</b>
<b>Nurse-facilitated group (EG1)</b>	15	27.00
<b>Volunteer-led group 1 (EG2)</b>	15	21.40
<b>Control group (CG)</b>	15	20.60
<b>Total</b>	45	

Key: N refers to the number of participants in a group

After six weeks of group interventions for the two Experimental groups and standard treatment for the Control group, the self-esteem scores were compared. The result of the Kruskal Wallis test was  $p=0.29$ .

Since  $p$  was greater than 0.05, it indicated that there was no statistically significant difference between the self-esteem of the three groups. Therefore, the null hypothesis was accepted.

#### **4.4.3.4 Comparison of the Post-test 2 scores of the three groups, using the Rosenberg Self-esteem Scale**

The mean rank of the Rosenberg scores of all three groups, after 12 weeks of the three groups is shown in Table 4.30. As at the previous scorings, the Experimental group 1 was still higher than the two other groups.

**Table 4.30: Frequency tabulations of the mean rank of the three groups using the Rosenberg self-esteem scale at Post-test 2**

<b>Group</b>	<b>N</b>	<b>Mean Rank</b>
<b>Nurse-facilitated group (EG1)</b>	15	28.83
<b>Volunteer-led group (EG2)</b>	15	20.67
<b>Control group (CG)</b>	15	19.50
<b>Total</b>	45	

Key: N refers to the number of participants in a group

After 12 weeks of groups interventions in the two Experimental groups, and standard treatment in the Control group, the result of the Kruskal Wallis test was  $p=0.074$ . Since this was greater than 0.05, it was concluded that there was no statistically significant difference in the self-esteem amongst the three group, therefore the null hypothesis was accepted.



#### **4.4.3.4.1 Conclusion**

The interventions appeared not to have had a positive effect on the self-esteem levels.

#### **4.4.4 Intra-group comparisons of the RSE scores**

The Friedman test was conducted in an attempt to establish if there were any significant difference in the RSE scores within each group. The null hypothesis for the level of self-esteem variable stated that there was no significant difference between the Pre-test, Post-test 1 and Post-test 2 scores within the Experimental group 1, Experimental group 2 and the Control group, at the  $p=0.05$  level of significance. The alternative hypothesis stated that there was a significant difference within each group, in the level of self-esteem variable, at the  $p=0.05$  level of significance.

##### **4.4.4.1 Comparison of the RSE scores within the Experimental group 1**

The mean RSE ranks of the Experimental group 1 scores at the three scoring sessions are seen in Table 4.31. The mean rank Post-test 1 (1.87) was lower than the Pre-test and Post-test 2 scores.

**Table 4.31: Frequency tabulations of the mean rank of the RSE scores within the Experimental group 1**

<b>Experimental group 1 (RSE scores)</b>	<b>Mean Rank</b>
<b>Pre-test</b>	2.17
<b>Post-test 1</b>	1.87
<b>Post test 2</b>	1.97

When the RSE scores of each member of the Experimental group 1 were compared, using the Friedman test, the result was  $p=0.350$ . This score was greater than  $p=0.05$ , therefore this result was not statistically significant, and the null hypothesis was accepted. This indicated that there was no difference between the RSE scores of the group members.

#### **4.4.4.1.1 Conclusion**

It could therefore be concluded that the RSE scores showed no change as a result of interventions within the group.

#### **4.4.4.2 Comparison of the RSE scores within the Experimental group 2**

Table 4.32, shows the mean rank of the RSE scores within the Experimental group 2. The mean rank RSE scores of the participants in Post-test 2 was lower than the Pre-test and Post-test 1 scores.

**Table 4.32: Frequency tabulations of the mean rank of the RSE scores of the Experimental group 2**

<b>Experimental group 2 (RSE scores)</b>	<b>Mean Rank</b>
<b>Pre-test</b>	2.10
<b>Post-test 1</b>	2.03
<b>Post test 2</b>	1.87

When the Friedman test was applied to the scores of each of each of the members of the Experimental group 2, the result was  $p=0.554$ . Since this was more than  $p=0.05$ , this result was not statistically significant. Therefore the null hypothesis was accepted, as there was no difference between the RSE scores of the members of the group. It was concluded that there was no change in the RSE scores despite interventions.

#### **4.4.4.3 Comparison of the RSE scores within the Control group**

Table 4.33, shows that mean rank of the RSE scores within the Control group. The mean rank RSE scores of the Post-test 2 scores were lower than those of the Pre-test and Post-test 1.

**Table 4.33: Frequency tabulations of the RSE scores within the Control group**

<b>Control group 2 (RSE scores)</b>	<b>Mean Rank</b>
<b>Pre-test</b>	2.07
<b>Post-test 1</b>	2.07
<b>Post test 2</b>	1.87

When the RSE scores of each member of the Control group was applied to the Friedman test, the result was  $p=0.695$ . Since  $p$  was more than 0.05, this result was not statistically significant. Therefore the null hypothesis was accepted, as there was no difference between the scores in the group.

##### **4.4.4.3.1 Conclusion**

It was concluded that the RSE scores did not change in the Control group during the three scoring sessions.

#### **4.4.5 Conclusion**

There was a statistically significant difference in the RSE scores of the three groups. At the start of the study 33.33 % had low self-esteem, 11.11 % had neither high nor low self-esteem and 55.55 % had high self-esteem. However, there was no difference between or within the groups at Post-test 1 and Post-test 2.

## **4.5 Analysis of the results for the life experience survey**

### **4.5.1 Introduction**

The Life Experiences Survey (1977) (LES) is a questionnaire consisting of 47 life events. This scale was used to investigate the occurrence, type and perceived impact of negative and/or positive life events on the participants. Therefore, this section deals with Objective 5 which describes the occurrence, type and perceived impact of life-events prior to and during the study amongst mild to moderately depressed Indian women in the three groups. The participants experienced between one and five life-events during the study period. These life-events could have been both positive and negative. Therefore, the totals in the tables relate to the occurrence of life-events not to the number of participants.

### **4.5.2 The timing of the life-events experienced by the whole sample as recorded at the three scoring sessions**

This timing of the Life-events is shown in Table 4.34 Life-events listed in the LES occurred during the Pre-test, Post-test 1 and Post-test 2 periods. The number of life-events experienced during the 7 to 12 month periods prior to the start of the study was double that of the 0 to 6 month (Pre-test) period. A combined score of 72 life-events was experienced during the year preceding the implementation of the study. In comparison, the number of life-events experienced over the first 6 weeks of the study (measured at Post-test 1) and over the second six weeks of the study (measured at Post-test 2) was 75 and 78 respectively. Therefore, the number of life-events was similar for each period, despite the fact that first period was much longer than the second and third periods. Literature has shown that there was a relationship between stressful life-events and the onset of depressive illness and throughout this study the participants had indicated that they had experienced some stressful life-events. (Weismann and Klerman, 1977 and Stuart and Sundeen, 1998.)

**Table 4.34: Frequency tabulations for the timing of the Life-events for the whole sample as recorded at the three scoring sessions**

Scoring Sessions	Pre-test				Post-test 1		Post-test 2	
Time that event occurred	7-12 months (before the Pre-test)		0-6 months (before the Pre-test)		6 weeks after Pre-test		6-12 weeks after Pre-test	
	N	%	N	%	N	%	N	%
	48	21.33	24	10.66	75	33.33	78	34.66

*Total N = 225*

*Total % = 100*

Key: N refers to the number of participants

#### **4.5.3 The timing of the life-events experienced by the three groups as recorded at the three scoring sessions**

The frequency of occurrence of life-events experienced by the participants over the year preceding the study and twelve weeks duration of the study, is shown in Table 4.35. The percentages are indicated column-wise and row-wise for each category of the timing of the life-events. Overall, the Experimental group 1 experienced 19 more life-events compared with the Experimental group 2 and 26 more than the Control group. Within each group (Row-wise %), the frequency of experiences at Pre-test, Post-test 1 and Post-test 2 were similar. For each of the groups, the combined total for the Pre-test period (72), for each of the groups was similar to the frequency of events in the shorter periods as measured at Pre-test 1 and Pre-test. This was the same pattern as seen in Table 4.33.

The reason for this increase is not known to the researcher, but it is possible that it was due to unresolved or chronic life-events which persisted in the individual's lives.

#### 4.5.3.1 Conclusion

Experimental group 1, in each test period (Pre-test, Post-test 1 and Post-test 2 periods) experienced the highest frequency of life-events.

#### 4.5.4 The perceived impact of the life-events experienced by the whole sample as recorded at the three scoring sessions

The impact of the life-events on the whole sample, using a seven-category scale, according to the LES, is shown in Table 4.36. The majority of the sample (83.55 %) had perceived the impact of life-events as 'extremely negative'. The categories of 'moderately negative' to 'extremely positive' ranged from 0 % to 18 %.

**Table 4.35: Frequency tabulations for the timing of the Life-events experienced by the three groups as recorded at the three scoring sessions**

Pre-test				Pre-test			Post-test 1			Post-test 2				
7-12 months				0-6 months			6 weeks after Pre-test			6-12 weeks after Pre-test				
E	N	C%	R%	N	C%	R%	N	C%	R%	N	C%	R%	TN	T%
Group 1	14	29.16	15.55	15	62.50	16.66	30	40.00	33.33	31	39.74	34.44	90	100
Group 2	18	37.50	25.35	5	20.83	7.04	24	32.00	33.80	24	30.76	33.80	71	100
Group	16	33.33	25.00	4	16.67	6.25	21	28.00	32.81	23	29.48	35.93	64	100
Total	48	100		24	100		75	100		78	100		225	100

Key: C = Column % C group = Control group R = Row %

E1 = Experimental group 1

E2 = Experimental group 2

T % = Total percentage of life-events

TN = Total number of life-events

**Table 4.36: Frequency tabulations for the perceived impact of the life-events experienced by the whole sample as recorded at the three scoring sessions**

<b>Perceived impact</b>	<b>N</b>	<b>%</b>
<b>Extremely negative</b>	188	83.55
<b>Moderately negative</b>	18	8.00
<b>Slightly negative</b>	6	2.66
<b>No impact</b>	0	0
<b>Slightly positive</b>	3	1.33
<b>Moderately positive</b>	2	0.88
<b>Extremely positive</b>	8	3.55
<b>Total</b>	225	100

Key: N refers to the number of participants

The impact of the life-events as perceived by the members of the whole sample is shown in Table 4.37. The percentages are indicated column-wise and row-wise for each category of impact. Within each period (Pre-test, Post-test 1 and Post-test 2) the majority of life-events was experienced as ‘extremely negative’ (81.94 %, 89.93 % and 79.48 %) respectively. The second most frequently experienced life-events reported had a ‘moderate impact’ on their lives. The rest of the categories were very much lower when compared with ‘extremely negative’ and ‘moderately negative’ categories.

#### **4.5.4.1 Conclusion**

The negative impact of life-events greatly outweighed the positive impact life-events categories in each of the time periods.

#### **4.5.5            The specific life-events experienced by the whole sample as recorded at the three scoring sessions**

Table 4.37, describes the frequency of specific life-events recorded as perceived by the whole sample from most frequently experienced to least frequently experience. The items are listed as found in the Life-Experience Survey questionnaire of 1977. The table consists of only the life-events experienced and recorded by the whole sample, and excludes those events, which did not occur. Only 22 of the 47 life-events did occur and were recorded.



**Table 4.37: Frequency tabulations for the perceived impact of the life-events experienced by the whole sample as recorded at the three scoring sessions**

	Pre-test			Post test 1			Post test 2				
	N	C%	R%	N	C%	R%	N	C%	R%	TotalN	Total%
<b>Perceived Impact</b>	59	81.94	31.38	67	89.93	35.63	62	79.48	32.97	188	100
<b>Extremely Negative</b>	6	8.33	33.33	3	4.00	16.66	9	11.53	50.00	18	100
<b>Slightly Negative</b>	1	1.38	16.66	3	4.00	50.00	2	2.56	33.33	6	100
<b>No Impact</b>	0	0	0	0	0	0	0	0	0	0	0
<b>Slightly Positive</b>	2	2.77	66.66	1	1.33	33.33	0	0	0	3	100
<b>Moderately Positive</b>	2	2.77	100.00	0	0	0	0	0	0	2	100
<b>Extremely Positive</b>	2	2.77	25.00	1	1.33	12.50	5	6.41	62.50	8	100
<b>Total</b>	72	100		75			78			225	100

Key: R% = Row-wise percent

Total % = Total percentage

C% = Column wise percent

Total N = Total number of life-events

**Table 4.38: Frequency tabulations of specific life-events experienced by the whole sample**

<b>No. and item</b>	<b>N</b>	<b>%</b>
<b>17. Major changes in financial status</b>	44	19.66
<b>18. Major changes in closeness of family members</b>	34	15.11
<b>3. Major changes in sleeping habits</b>	25	11.11
<b>13. Serious illness or injury to close members of the family</b>	21	9.33
<b>24. Major changes in number of arguments</b>	20	8.90
<b>8. Outstanding personal achievements</b>	18	8.00
<b>5. Major changes in eating habits</b>	10	4.44
<b>4. Death of close family member</b>	9	4.00
<b>22. Major changes in religious activities</b>	9	4.00
<b>20. Changes of residence</b>	8	3.66
<b>32. Major changes in social activities</b>	8	3.66
<b>14. Sexual difficulties</b>	3	1.33
<b>6. Repossession of bond or loan</b>	3	1.33
<b>35. Serious injury or illness of close friend</b>	3	1.33
<b>36. Son or daughter leaving home</b>	2	90
<b>19. Gaining a new family member</b>	2	90
<b>15. Trouble with employer</b>	1	44
<b>33. Major changes in living conditions</b>	1	44
<b>21. Marital separation</b>	1	44
<b>16. Trouble with in-laws</b>	1	44
<b>Total</b>	225	100

Table 4.39 describes the frequency of the specific life events as experienced by the Experimental group 1, Experimental group 2 and the Control group during and before the study. ‘Major changes in financial status’, row-wise (R %) was frequently noted in the Experimental group 1, Experimental group 2 and the Control group, namely 31.80 % (14), 43.18 % (19) and 25 % (11) respectively.

The next most frequency experienced life-event (row wise) was ‘major changes in closeness of family members’, this being 50 % (17) in the Experimental group 1, 32.35 % (11) in the Experimental group 2, and 17.65 % (6) in the Control group. “Major changes in sleeping habits” was also frequency experienced and ranged from 24 % to 44 % (row-wise) and 8.45 % to 17.18 % (column-wise) in the three groups. The life-event involving finance was recorded frequently, and this was evident in the three periods. This was followed by relationship problems with family members and with sleeping.

The rest of the categories were less frequently recorded, with small difference amongst the three groups. These included gaining a new family member, trouble with in-laws, trouble with employer, marital separation and major changes in living conditions. Literature has reflected that the common life-stressors preceding depressive illness was, family, finance, multiple roles, cultural, medical, ageing, death of spouse, marriage, divorce. (Gordon, et al. 1988, Maynard, 1993, Stuart and Lararia, 1998 and Nair and Allwood in Gagiano, 2001).

#### **4.5.5.1 Conclusion**

Problems of finance, relationships and sleeping patterns were commonly experienced by all three groups prior to and during the study.

**Table 4.39: Frequency tabulations of specific life-events experienced by the three groups as recorded during the study**

Life-events	Experiment Group 1			Experiment Group 2			Control Group			
No and items	N	R %	C %	N	R %	C %	N	R %	C %	Total N
3. Major changes in sleeping habits	8	32.00	8.88	6	24.00	8.45	11	44.00	17.18	25
4. Death of close family member	3	33.33	3.33	4	44.44	5.63	2	22.22	3.12	9
5. Major changes in eating habits	4	40.00	4.44	2	20.00	2.81	4	40.00	6.25	10
6. Repossession of bond or loan	1	33.33	1.11	0	0	0	2	66.66	3.12	3
8. Outstanding personal achievement	8	44.44	8.88	4	22.22	5.63	6	33.33	9.37	18
13. Serious illness or injury to close members of the family	13	61.90	14.44	4	19.40	5.63	4	19.40	6.25	21
14. Sexual difficulties	2	40.00	2.22	0	0	0	0	60.00	0	3
15. Trouble with employer	0	0	0	0	0	0	1	100.00	1.56	1
16. Trouble with in-laws	0	0	0	0	0	0	1	100	1.56	1
17. Major changes in financial status	14	31.80	15.55	19	43.18	26.76	11	25.00	17.18	44
18. Major changes in closeness of family members	17	50.00	18.88	11	32.35	15.49	6	17.64	9.37	34
19. Gaining a new family member	0	0	0	1	50.00	1.40	1	50.00	1.56	2
20. Change of residence	1	12.50	1.11	5	62.50	7.04	2	25.00	3.12	8
21. Mental separation	1	100.00	1.11	0	0	0	0	0	0	1
22. Major changes in religious activities	3	33.33	3.33	4	44.44	5.63	2	22.22	3.12	9
24. Major changes in number of	9	45.00	10.00	6	30.00	8.45	5	25.00	7.81	20

<b>arguments</b>										
<b>32. Major changes in social activities</b>	3	37.50	3.33	3	37.50	4.22	2	25.00	3.12	8
<b>33. Major changes in living conditions</b>	0	0	0	0	0	0	1	100.00	1.56	1
<b>35. Serious injury or illness of close friend</b>	1	33.33	1.11	2	66.66	2.81	0	0	0	3
<b>36. Son or daughter leaving home</b>	2	100.00	2.22	0	0	0	0	0	0	2
<b>Total N</b>	90		100	71		100	64		100	225

**Total % = 100**

Key: R % = Row wise percent

Total % = Total percentage

C % = Column wise percent

Total N = Total number of life-events

#### **4.5.6 Conclusion**

All the participants experienced at least one life-stressor. In Chapter Two, it has been shown that especially negative, stressful events predispose people to depressive illness. Negative life-events can interfere with the social, psychological and biological areas of functioning of people (Sarason, Johnson and Siegel, 1987). It is possible that some of the life-events that were experienced by the participants might have limited the improvement in the BDI and RSE scores for some participants. However, it had been explained in Section 3.13, the LES was a gross measure, and was not able to precisely assess the effects of life-events on the depressive levels and self-esteem.

## **4.6 Analysis of the results of the assessment of perceived exercise levels**

### **4.6.1 Introduction**

Exercise was not introduced as part of the intervention for the group members in this study. However, in view of the link between exercise and depressive levels, it was necessary to assess whether exercise levels changed during the course of the study.

Le Grange (1993: 191), Plante (1993: 191), and Todd (1997: 80) reported that exercise had psychological, antidepressant and anxiolytic benefits for patients. Le Grange, 1993, further noted that exercise increased the plasma levels of endorphins. This is discussed further in Chapter Two. An objective measurement of the exercise levels of the participants during the study would have entailed a large amount of work and this was considered to be beyond the scope of this study. Nevertheless, a question was formulated to assess whether there was a change in the perceived exercise levels amongst the participants, which could have influenced their levels of depression. This was in answer to Objective 6 of the study, which was to assess whether there was a change in the perceived levels of exercise, which could have influenced the levels of depression in mild to moderately depressed Indian women in the three groups. The responses to this question were analysed using descriptive statistics and are discussed in the following section of the report.

### **4.6.2 Analysis of exercise levels of the whole sample at Post-test 1**

The exercise level of the entire sample after 6 weeks of group interventions is shown in Table 4.40 below. After 6 weeks of group intervention, 51.1 % (23) of the participants had done more exercise 31.1 % (14) less exercise and 17.7 % (8) had done the same amount of exercise.

**Table 4.40: Frequency tabulations of exercise levels for the whole sample as recorded at Post-test 1**

Amount of exercise at Post-test 1	N	%
Less	14	31.11
Same	8	17.77
More	23	51.11
Total	45	100

#### 4.6.3 Analysis of exercise levels of the whole sample at Post-test 2

The exercise levels at Post-test 2 are shown in Table 4.41. After 12 weeks of group interventions 46.5 % (21) of the participants recorded ‘more’ exercise, ‘less’ by 31.1 % (14) and ‘same’ 22.22 % (10). The trend followed was similar in all three categories of exercise in the 6 and 12 weeks periods.

**Table 4.41: Frequency tabulations of exercise levels for the whole sample as recorded at Post-test 2**

Amount of exercise at Post-test 1	N	%
Less	14	31.11
Same	10	22.22
More	21	46.66
Total	45	100

Key: N refers to number of participants

At both Post-test 1 and Post-test 2, there was a similar trend in the exercise levels for the entire sample. The majority of the participants reported doing more exercise than at the start of the study.

#### **4.6.4 Analysis of exercise levels for the three groups as recorded at Post-test 1 and Post-test 2**

The results of the three groups are shown in Table 4.42. In both the Experimental group 1 and Experimental group 2, after 6 and 12 weeks, the exercise responses indicated that 46.66 % to 66.66 % of members of both the groups had increased their exercise levels and 13.33 % to 26.66 % of the members did 'less' or the 'same' amount of exercise. Conversely, the response for the Control group indicated that 46.66 % to 53.33 % of its members had reduced exercise levels in both the 6 and 12 week periods, 13.33 % to 26.66 % did the 'same' amount of exercise and 26.66 % to 33.33 % did 'more' exercise. The mode and the median varied at Post-test 1 and Post-test 2 for each group. In the Experimental group 1 the mode and median was 'more' exercise. In Experimental group 2 the mode was 'more' exercise and the median was 'same' and 'more' exercise. In the Control group the mode was 'less' exercise and the median was 'less' and the 'same' amount exercise. Although there appeared to be overall improvement in the exercise levels of Experimental group 1 and Experimental group 2, no statistical association between levels of exercise and the BDI scores was found.

Exercise levels did not significantly increase in the groups. Therefore it does not seem to be likely that the improvement in the BDI scores could be attributed to the influence of exercise as an extraneous factor



**Table 4.42: Frequency tabulations of exercise levels as recorded by three groups at Post-test 1 and Post-test 2 scoring sessions**

Groups	Experimental Group 1				Experimental Group 2				Control Group			
Weeks	6 (Post-test 1)		12 (Post-test 2)		6 (Post-test 1)		12 (Post-test 2)		6 (Post-test 1)		12 (Post-test 2)	
No. and %	N	%	N	%	N	%	N	%	N	%	N	%
Amount of exercise												
Less	2	13.33	3	20.00	4	26.66	4	26.66	8	53.33	7	46.66
Same	3	20.00	2	13.33	3	20	4	26.66	2	13.33	4	26.66
More	10	66.66	10	66.66	8	53.33	7	46.66	5	33.33	4	26.66
Total	15	100	15	100	15	100	15	100	15	100	15	100
Median	More		More		More		Same		Less		Same	
Mode	More		More		More		More		Less		Less	

Key: N refers to number of participants

#### 4.6.5 Conclusion

This Chapter dealt with the analysis of the data in respect of the six objectives of the study.

Both descriptive and inferential statistics of analysis was undertaken. The levels of depression as measured by the BDI scores of both intervention groups improved significantly. No improvements in the self-esteem levels were identified. Problem relating to finance, relationships and sleep patterns were most frequently reported.

The conclusion and recommendations from the results of the study will be discussed in Chapter Five.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The purpose of this Chapter is to give an overview of the findings of this study in relation to the study objectives. As it is important that nursing research be used to improve psychiatric nursing practice, recommendations for the implementation of group interventions for specific psychiatric patients have been made. In addition, recommendations for further research have been identified and discussed.

#### **5.2 Overview of the findings and conclusions**

Objective 1 determined the effectiveness of a Nurse-facilitated group intervention as an adjunct to antidepressant medication on mild to moderately depressed Indian women in terms of subjective findings (levels of depression and self-esteem) over a fixed period of time. The Nurse-facilitated group sessions, as an adjunct to antidepressant medication (standard treatment), were effective in reducing the levels of depression. No changes were noted in the self-esteem levels of the participants. Positive feedback from the multidisciplinary team in the psychiatric clinic and the participants themselves indicated that they had made improvements in their individual life-styles. The group sessions were beneficial in empowering, de-stressing and providing the women with both life and coping skills.

Objective 2 determined the effectiveness of the Volunteer-led group intervention as an adjunct to antidepressant medication (standard treatment) on mild to moderately depressed Indian women in terms of subjective findings (levels of depression and self-esteem) over a fixed period of time. A positive improvement was noted by the reduced levels of depression after the introduction of Volunteer-led group sessions. The participants showed no changes on their self-esteem levels.

Objective 3 determined the effectiveness of standard treatment alone on mild to moderately depressed Indian women in terms of subjective findings (levels of depression and self-esteem) over a fixed period of time. Therefore, a group intervention was not introduced for the participants. The participants showed no changes in their levels of depression and self-esteem.

Objective 4 compared the effectiveness of the Nurse-facilitated group intervention, Volunteer-led group intervention and the standard treatment (Control group in terms of the levels of depression and self-esteem) on mild to moderately depressed Indian women. At the beginning of the study, the levels of depression of all three groups were similar. Although the levels of depressions in both intervention groups improved, the levels of depression of the participants in the Nurse-facilitated group improved more significantly in comparison to those of the Volunteer-led group. The improvements of the levels of depression were attributed to the effectiveness of the group interventions. No change was noted in the levels of depression in the Control group. Despite the influence of group interventions in the Nurse-facilitated group and the Volunteer-led group and none in the Control group, no changes in the levels of self-esteem were noted in all the participants.

Objective 5 described the occurrence, type and perceived impact of life-events prior to and during the study amongst mild to moderately depressed Indian women in the three groups. All the participants had experienced at least one life-event prior to and during the study. Financial, sleeping habit and relationship problems were most frequently experienced by many participants. However the effect of the levels of depression and self-esteem on life-events could not be measured objectively, and therefore it was not possible to comment on the possibility of changes.

Objective 6 assessed whether there was a change in the perceived levels of exercise, which could have influenced the levels of depression and self-esteem of mild to moderate depressed

Indian women in the three groups. Varied changes in exercise levels were reported by the participants. However, it was not possible to objectively measure the influence of exercise levels on the levels of depression and self-esteem in the three groups in the study.

### **5.3 Recommendations**

- The nurse-facilitated group and the Volunteer-led group intervention was successful in a group of depressed Indian women, with mild to moderate depression. A sample of 45 was used, 15 to each group. However, this sample was small and consisted of only Indian women from a specific geographical area. It is suggested that replication of this study using a multi-cultural sample, different gender, a larger sample size be used in order to generalize the outcome of this study to other groups and settings.
- The number of members in each intervention group was 15. However, a group size of a maximum of 10 members is recommended for more effective facilitation that is more effective and more individualized attention for the group members.
- It is recommended that the effectiveness of exercise as an enhancement to the group interventions be explored.
- The identification of a self-esteem scale, which is sensitive enough to assess change over a short period of time, in patients that have an existing diagnosis of depression, is recommended for replication studies.
- A life-events scale that more precisely measure the influence of life-events, on the existing depressive state should be used in replication studies.
- Children may accompany the women to group sessions. It is therefore recommended that a room be arranged to keep the children busy, whilst their parents are attending the group sessions.

- The format of the group sessions was based on Gordon's Women's Workbook (1988b) and Facilitator's manual (1988a). These books are excellent guides for facilitators. The objectives and discussion questions are clearly and simply outlined for each group session. Therefore these books are highly recommended for the implementation of Nurse-facilitated group interventions in psychiatric clinic settings. Although initially the manuals were developed for the United States of America, they worked well for this group as evidenced by the positive results obtained.
- Future studies should contextualize a similar research using an appropriate nursing theory framework.
- A study replicating the entire 20 group sessions using the Facilitator's Manual (1988a) should be implemented.
- It is recommended that purposeful, creative activities that are inexpensive, beneficial, culturally and age appropriate be pre-planned to enhance the success of the Volunteer-led group sessions.
- The treatment of mild to moderately depressed patients should not consist of antidepressants alone. It is recommended that patients be reviewed six monthly by a psychiatrist, and that an adjunctive treatment, such as group therapy be introduced after at least their first three months of antidepressant treatment.
- As had been explained in Chapter One, there is a gross shortage of psychologists and psychiatrists in South Africa. Consequently, the number of these health professionals is insufficient, to provide group interventions for all mild to moderately depressed patients. Nurses earn lower salaries than these specialists and volunteers render their services free. These individuals may be more readily available than the specialists.

Therefore, it is recommended that psychiatric nurses and volunteers be used, to implement the group interventions that have been evaluated in this study on a wider scale. However, they must be properly trained to conduct these group interventions. Currently psychiatric nurses receive basic information on conducting group interventions. It is suggested that more training be given to psychiatric nurses in the theory and practice of group interventions for use for specific psychiatric disorders.

#### **5.4 Conclusion**

This study highlighted the experiences of exposure to Nurse-facilitated cognitive and the Volunteer-led craft group interventions on mild to moderately depressed women. These interventions provided the women with hope, purpose, empowerment and choices in their lives. It has demonstrated that both interventions have the potential to assist mild to moderately depressed women in South Africa. Given the challenges facing the health system, particularly in relation to shortages of specialists and the prevalence of depression, it is strongly advised that greater attention to such interventions be considered.

## LIST OF REFERENCES

- Abott, P. and Sapsford, R. 1992. Research into practice – a reader for nurses and the caring professions. Buckingham: Open University Press.
- Aber, D. E. 1997. The role of the occupational therapist in the treatment of alcohol – related disorders. In Crouch, R.E. and Alers, V.M. (eds.), Occupational therapy in psychiatry and mental health. 3<sup>rd</sup> edition. Chapter 20. Cape Town : Maskew, Miller, Longman.
- Adler, N. 1997. Self-esteem. [online], Available from: <http://www.macses.ucf.edu/html> [Accessed on 3 June 2002]
- Allwood, C. and Nair, M. 2001. Mental health disorders in women. In Robertson, B., Allwood, C. and Gagiano, C. (eds.), Textbook of psychiatry for Southern Africa. Chapter 19. Cape Town: Oxford University Press.
- American Psychiatric Association. 2000. DSM IV-Diagnostic and Statistical Manual of Mental Disorders. 4<sup>th</sup> edition. Washington DC: American Psychiatric Association.
- Angst, J. 1990. Natural history and epidemiology of depression. In Cobb, J. and Goeting, N.L.M. (eds.). Current approaches – prediction and treatment of recurrent approaches. Chapter 1. Southampton : Durham Laboratories Limited.
- Arrtal, M. and Sherman, C. 1998. Exercise against depression. [online], Available from <http://www.physsportsmed.com/issues> [Accessed on 31 May 2002]
- Barbee, E.L. 1992 African American women and depression: a review and critique of the literature. Archives of Psychiatric Nursing, VI (5) : 257-265.
- Bartho, C. Flynn, C. and Sparks, C. 2000. The power of everyday occupations in providing meaning and purpose. South African Journal of Occupational Therapy, 30(1): 3-6
- Baumann, S.E. 1998. An interactive bio-psychosocial systems model and preface. In Psychiatry and primary health care. Kenwyn : Juta.
- Beck, A.T., Ward, C.H., Mendelson, M., Mock, J. and Erbaugh, J. 1961. An inventory for measuring depression. Archives of General Psychiatry, (4): 53-63.
- Beck, A.T. 1973. The diagnosis and management of depression. Philadelphia: University of Pennsylvania Press.
- Berber, M.J. 1999. Pharmacological treatment of depression. Canadian Family Physician, (45): 2663-2668.
- Berk, M. 2000. Foreword in Hume, T. and Wynchank, D. Women and food. Cape Town : Zebra Press.
- Bhana, A. 1981. A study of certain personality, demographic, and related variables among Indian females attempted suicide. M.A thesis. Durban: University of Durban-Westville.

- Blumenthal, J. 2000. Depression and exercise. [online] Available from: <http://www.cnn.com/2000/Health> [Accessed on 31 May 2002]
- Bothwell, R. 1998. Cognitive and other behavioral therapies. In Baumann, S.E (ed.) Psychiatry and primary health care. Kenwyn: Juta.
- Bowling, A. 1991. Measuring health. – a review of quality life measurement scales. Milton Keynes: Open University Press.
- Bradshaw, D. 1997. The broad picture: health status and determinants. In South African Health Review. Durban: Health Systems Trust.
- Brooking, J.I 1992. A textbook of psychiatric and mental nursing. In Brooking, J.I, Ritter, S.A.H and Thomson, B.L, (eds.), London: Churchill Livingstone.
- Buys, R. and Muller, M. 2000. The experiences and perceptions of nursing service managers regarding transformation of health services in selected provincial academic health complexes. *Curationis*, 23 (2): 50-56.
- Chaouloff, F. 1997. Exercise against depression. In Artal, M. and Sherman, C. 1998. [online], Available from <http://www.physsportsmed.com/issues> [Accessed on 31 May 2002]
- Clark, W.G and Vorst, V.R 1994. Group therapy with chronically depressed geriatric patients. *Journal of Psychosocial Nursing*, 32(5) : 9-13.
- Conroy, R.W. 1982. Exercise prescription and mental health – recent developments. In Le Grange, D. 1993.
- South African Journal of Continuing Medical Education, 11(2) : 191-197
- Daubenton, F 1998. Diagnosis and classification. In Baumann, S.E (ed). Psychiatry and primary health care. Chapter 7. Kenwyn: Juta.
- Davison, G.C and Neale, J.M 1982. Abnormal Psychology. 3<sup>rd</sup> ed. New York: John Wiley and Sons.
- De Jager, W. and Kirk, J. 1998. Using group to help people. In Baumann S.E (ed). Psychiatry and Primary health care. Chapter 38. Kenwyn: Juta.
- Department of Health 1997. Annual report. Pretoria: Department of Health.
- Department of Health. Duty Sheet. Z 249(81/100879). Pretoria: Department of Health.
- Depression and Anxiety Group. Undated. Depressive disorders.[online], Available from: <http://www.anxiety.org.za>. [Accessed 4 February 2003].
- Depression and Anxiety Group. Undated. Aims and objectives of the depression and anxiety support group.[online], Available from <http://www.anxiety.org.za> [Accessed 4 February 2003]
- Depression and Anxiety Group and Medical Research Council, 1999. Depression treatment and referral guide. Tygerberg: University of Stellenbosch: Department of Psychiatry.



De Witt, P.A 1997. Creative ability – a model for psychiatric occupational therapy. In Crouch, R.B and Alers, V.M (eds). Occupational therapy in psychiatry and mental health. 3<sup>rd</sup> ed. Chapter 1. Cape Town: Maskew, Miller and Longman.

Dittrich, L. 2002. [online], About-face facts on eating disorders. Available from <http://www.about-face.org/r/facts/ed.html>. [Accessed May 2002]

Drennan, G. 1998a. Cultural psychiatry. In Robertson B., Allwood C. and Gagiano C. (eds.) Textbook of psychiatry for Southern Africa. Chapter 26. Cape Town: Oxford University Press.

Drennan G. 1998b. South African categories of distress. In Baumann, S.E (ed). Psychiatry and primary health care. Chapter 5. Kenwyn: Juta.

Doyne, Ossip-Klein and Bowman 1987. Artal M. and Sherman C. 1998. Exercise against depression. [online], available from <http://www.physsportsmed.com/issues> [Accessed on 31 May 2002]

Evans S.H, 2002. Recreational activities. [online], Available from <http://www.intergens.com/recreation.html>. [Accessed on 18 June 2002]

Foley D. and Nechas E. 1993. Self-esteem. In Women's encyclopedia of health and emotional healing. Pennsylvania: Rodale Press.

Forte V. 2000. Depression. Update, January: 61-64. Gagiano C. 2001. Mood disorders. In Robertson B., Allwood C. and Gagiano C. (eds). Textbook of psychiatry for Southern African. Cape Town: Oxford University Press.

Garber J., Miller S.M and Abramson L.Y. 1980. On the distinction between anxiety and depression: perceived control, certainty and probability of goal attainment. In Garber J. and Seligman M.E.P (eds). Human helplessness – theory and applications. Chapter 6. London: Academic Press.

Gibbon C.J (ed) 2000. South African medicines formulary. 5<sup>th</sup> edition. South African Medical Association. Cape Town: Health and Medical Publishing.

Gilbert L., Selikow T. and Walker L. 1996. Society, health and disease. Randburg: Ravan Press.

Gordon V.C 1988 (a). unpublished. Facilitator's Manual. Minnesota: University of Minneapolis.

Gordon V.C 1988 (b). Unpublished. Women's Workbook. Minnesota: University of Minneapolis.

Gordon V.C 1992. Treatment of depressed women by nurses. In Abbott P. and Sapsford R. (eds.) Research into practice. Buckingham: Open University Press.

Gordon V.C, Summer J. and McMichael C. 1995. Intervention for depression-behavioral restructuring models that works. Employee Assistance, February: 6-10.

- Hauenstein E.J 1997. A nursing practice paradigm for depressed rural women: the women's affective illness treatment program. *Archives of Psychiatric Nursing*, 11(1): 37-45.
- Henderson A.D 1998. Preparing feminist facilitators. *Journal of Psychosocial Nursing*, 36(3): 25-33.
- Holmes T.H and Rahe R.H 1967. The social readjustment rating scale. *Journal of Psychosomatic Research*, 11: 213-218.
- Howcroft G. 1990. The self-esteem of black university students. *South African Journal of Sociology*, 21(1): 31-36.
- Hume T. and Wynchank D. 2000. *Women and food*. Cape Town: Zebra Press.
- Isaacs A. 1998. Depression and your patient. *American Journal of Psychosocial nursing*, 98(7): 26-31.
- Kaliski S. 1998. The Southern African context. In Baumann S.E (ed). *Psychiatry and primary health care*. Kenwyn: Juta.
- Kaplan H.I and Sadock B.J 1998. *synopsis of psychiatry*. 8<sup>th</sup> edition. Baltimore: Williams and Wilkins, Sadock.
- Katzenellenbogen J.M, Joubert G. and Abdool Karmin, S.S 1997. *Epidemiology – a manual for South Africa*. Cape Town: Oxford University Press.
- Kavan M.G, Pace I.M, Joseph, G.P and Barone E.J 1990. Screening for depression by use of patient questionnaires. *American Physician*, 41(3): 897-904.
- Kibel D. 1998. Interviewing and assessment. In Baumann, S.E (ed). *Psychiatry and primary health care*. Chapter 6. Kenwyn: Juta.
- Kreuger R.A and King J.A 1998. *Focus groups: involving members in focus groups*. London: Sage.
- Lader M. 1997. Current trends in drugs for depression. Update, January: 17-20.
- Lawson B. 2004. Personal communication with chief professional nurse. Regional Community Psychiatric Services Office, Department of Health, Durban, 16 March 2004.
- Le Grange D. 1993. exercise prescription and mental health – recent developments. *South African Journal of Continuing Medical Education*, 11(2): 191-197.
- Lewinsohn P.M., Sullivan M. and Grosscup S.J 1982. Behavioral therapy: Clinical Applications. Chapter 3. In Rush A.J (ed). *Short-term psychotherapies for depression*. Great Britain: John Wiley and Sons.
- LoBiondo-Wood G. and Haber J. 1998. *Nursing research*. 4<sup>th</sup> edition. St. Louis: C.V Mosby.

Lusting S.L, Malomane E. and Tollman S. 1997. A support group for mentally ill people. *World Health Forum*, 18: 319-322.

Makhale M.S 1995. An analysis of support groups for the mentally ill people, as a psychiatric intervention strategy in the communities of South Africa. M.A thesis. Durban: University of Natal.

Makhale M.S and Uys L.R 1997. An analysis of support groups for the mentally ill as a psychiatric intervention strategy in South Africa. *Curationis*, 20(1): 44-49.

Malcolm C. and Berard R. 2001. Psychosocial interventions. In Robertson B., Allwood C. and Gagliano C. (eds). *Textbook of psychiatry for Southern African*. Cape Town: Oxford University Press.

Mantzaris E.A 1988. Religion as a factor affecting the attitude of South African Indians towards family solidarity and older persons. *South African Journal of Sociology*, 19(3): 111-116.

Maynard C., 1993(a). Comparison of effectiveness of group interventions for depression in women. *Archives of Psychiatric Nursing*, VII(5): 277-283.

Maynard C., 1993(b). Psycho-educational approach to depression in women. *Journal of Psychosocial Nursing*, 31(12): 9-14.

McDowell I. and Newell C. 1996. *Measuring health-guide to rating scales and questionnaires*. Chapter 6. 2<sup>nd</sup> edition. New York: Oxford University Press.

McGillivray S. and Reid I., 2001. Depressive disorder. *Psychiatry Update*, May: 18-26.

Mbambo S., Uys L.R and Groenewald B., 2003. A job analysis of selected health workers in a district health system in Kwazulu-Natal. *Curationis*, November 2003: 42-52.

Meys U. 1998. The unhappy or depressed patient. In Baumann S.E (ed). *Psychiatry and primary health care*. Chapter 7. Kenwyn: Juta.

Motsepe M.I.G 1989. Effectiveness of the use of structured counseling of the symptoms of depressed patients in an acute psychiatric unit. Unpublished M.A thesis, Durban: University of Natal.

Mthanti N.C.G 1991. The effectiveness of the use of structured counseling of the symptoms of depressed patients in an acute psychiatric unit. Unpublished M.A thesis, Durban: University of Natal.

Nair M. 1998. Psychiatric morbidity in black patients suffering from cancer of the cervix. In *Psychiatry and Women's health*. Isando: Eli Lilly.

National Department of Health, 1998. *Standard treatment guidelines and essential drugs list for South African-primary health care*. Pretoria: Department of Health.

National Institute of Mental Health, 2001. Depression in women and men. What's the difference? [online]. Available from

<http://www.nimh.nih.gov/research/differencesummary.cfm>

[Accessed 31 February 2002]

National Mental Health Association 2000. Depression in women. [online], Available from <http://www.nmha.org/infoctr/factsheets/23.cfm> [Accessed 31 February 2002]

Nichols K. and Jenkinson J. 1991. Leading a support group. London: Chapman and Hall.

Njenga F. 1998. Depression in Kenyan Professional Women. In Psychiatry and women's health. Isando : Eli Lilly.

Wagner W.E, 2007. Using SPSSSTM for Social statistics and research methods. Norusis, M.J 1992. SPSS/PC and base system user's guide. Version 5.0. Chicago: SPSS Incorporated. Pine, Forge pres: Thousand Oaks, Lalcformia.

Okasha A. 1998. Long- term treatment of depression. In Psychiatry and women's health, September. Isando: Eli Lilly.

Orkin F.M 1998. Census in brief. Pretoria: Department of Statistics.  
O'Toole S.M and Johnson D.A 1997. Psychobiology and psycho – pharmacotherapy of unipolar major depression: review. Archives of psychiatric Nursing, X1 (6): 304-313.

Pillay A.L 1988. Midlife depression and the “empty nest syndrome” in Indian women. Psychological Reports, 63: 591-594.

Pillay A.L, van der Veen, M.B.W and Wasenaar, D.R 2001. Non-fatal suicidal behavior in women – the role of spousal substance abuse and marital violence. South African Medical Journal, 91(5): 429-432.

Pillay A.L, and Vawda, N.B.M 1989. Alcohol-related Para-suicide amongst married people. South African Medical Journal, 75: 120-121.

Plante, G.T, 1996. Does exercise help in the treatment of psychiatric disorders? Journal of Psychosocial Nursing, 34: 38-43

Polit D.F and Hungler, B.P 1997. Essentials of nursing research – methods, appraisal and utilization. 4<sup>th</sup> (ed) Philadelphia: J.B Lippincott.

Ramouthar R.1992. The nature and extent of reported abuse in the Chatsworth Indian Community. M.A thesis, Durban: University Press.

Roos L., Joubert P. and Stein D.1998. Textbook of psychiatry for Southern Africa. In Robertson B., Allwood, C and Gagiano, C.(eds). Cape Town: Oxford University Press.

Rosenberg M. 1965. Society and the adolescent self-image. New Jersey: Princeton University Press.

Rosenberg M. Undated. Rosenberg Self-Esteem Scale. The Morris Rosenberg Foundation. Department of Sociology. University of Maryland, College Park.[online] Available from: <http://www.bsos-umd.edu/soc/rosenberg.html> [Accessed on 3 June 2002]

- Rudestam K.E and Newton R.R 1992. Surviving your dissertation. California: Sage
- Sarason I.G, Johnson, J.H and Siegel J.M 1978. Assessing the impact of the life-experiences survey. *Journal of Consulting and Clinical Psychology*, 46(5):932-946.
- Schlebusch L.1987. Psychological treatment of affective disorders. *Psychiatric Insight*, 4(part 2): 19-22.
- Seymour S.C 1999. Women, family and child care in India- a world in transition. New York: Cambridge University Press.
- Shearer S.L and Adams G.K, 1993. Non-pharmacologic aids in the treatment of depression. *American Family Physician*, 47(2): 435-441.
- South African Nursing Council 1978. Regulations relating to the scope of practice of persons who are registered or enrolled under the Nursing Act 1978. Regulation 2598 as amended. Pretoria: Government Printers.
- Stein D.J 1998. Psychiatric disorders and disability. In *Depression and Anxiety Newsletter*, 2(3): 1-16.
- Steiner M. 1998. Anxiety and depression in women survivors of domestic violence. In *Psychiatry and women's health*. September. Isando: Eli Lilly.
- Stewart J.A and Salt P. 1981. Life-stress, life-styles, depression and illness in adult women. *Journal of Personality and Social Psychology*, 40(6): 1063-1069.
- Strokes P.E 1993. Fluoxetine: 5 year review. *Clinical Therapeutics*, 15(2): 216-243. Kaplan and Sadock's symptoms of psychiatry. 10<sup>th</sup> .
- Stuart G.W and Laraia, M.T 1998. Stuart's and Sundeen's principles and practice of psychiatric nursing. 6<sup>th</sup> edition. Washington: C.V Mosby.
- Sadock B.J and Sadock V.A, 2007. Philadelphia: USA. Hbbsnicott Williams and Wilkins.
- Sugden J., Bessant A., Eastland M. and Field R. 1986. A handbook for psychiatric nurses. London: Harper and Row.
- Todd D.B., 1997. Prescription of exercise. Update, April: 80-85.
- Townsend M.C 1996. Psychiatric mental health nursing-concepts of care. 2<sup>nd</sup> edition. Philadelphia: F.A Davis.
- Uys L.R, 1991. A theoretical framework for psychiatric rehabilitation. *Curationis*, 4 (3): 1-5
- Uys L.R and Middleton L., 1997. Mental health nursing – a south African perspective. 3<sup>rd</sup> edition. Kenwyn: Juta.

Van Greunen A. 1997. In Crouch R.E and Alers V.M (eds). Occupational therapy in psychiatric and mental health. 3rd edition. Chapter 20. Cape Town: Maskew, Miller, Longman.

Walker M.1994. Women in therapy and counseling. London: Open University Press.

Wassenaar D.R, van der Veen M.B.W and Pillay A.L, 1998.

Women in cultural transitions: Suicidal and Life threatening behavior. The American Association of Suicidology, 28(1): 82:93

Wassenaar D.R, van der Veen M.B.W and Pillay A.L, 2001. Non-fatal suicidal behavior in women – the role of spousal substance abuse and marital violence. South African Medical Journal, 91(5): 429-432.

Weissman M.M, 1979. The Psychological treatment of depression. Archives of General Psychiatry, 36: 1261-1269

Weissman M.M and Klerman G.L 1977. Sex differences and the epidemiology of depression. Archives of General Psychiatry, 34: 98-111.

Zerhusen J.D, Boyle K. and Wilson W. 1991. Out of darkness: group cognitive therapy for the depressed elderly. Journal of Psychosocial Nursing and Mental Health Services, 29(9): 16-21.

Zlotnick C., Kohn R., Keitner G. and Grotta S.A.D. 2000. The relationships and major depressive disorder: findings from the National Co morbidity Survey. Journal of Affective Disorders, 59:200-211.

Zuma S.M 2003. Are we really transforming? Nursing Update, February 2003: 45.