PERCEPTIONS OF STUDENTS AND SUPERVISORS REGARDING
THE BLOCK SYSTEM USED IN GENERAL NURSE TRAINING IN
ZIMBABWE

by

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Submitted in accordance with the requirements for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

in the

DEPARTMENT OF ADVANCED NURSING SCIENCES

at the

UNIVERSITY OF SOUTH AFRICA

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NOVEMBER 2000
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I declare that Perceptions of Students and Supervisors Regarding the Block System Used in General Nurse Training in Zimbabwe is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Signature
(Z.J.M. Chiware)
ABSTRACT

The study investigated the perceptions of student nurses and supervisors with regard to the block system used in the general nurse diploma programme in Zimbabwe. Their perceptions were elicited so that the researcher could identify the positive and negative aspects of the block system which respectively promote and inhibit or obstruct the teaching and learning of student nurses. The study was conducted at the Harare, Parirenyatwa, Mpiolo and United Bulawayo Schools of Nursing and in Mashonaland East province.

A cross-sectional descriptive survey research design was used to obtain accurate information about the block system. Data was collected from nurse teachers, clinical teachers and sisters in charge of wards/units by means of structured interviews and from community health nurses and student nurses by means of self-administered questionnaires. The following positive aspects of study blocks were identified: the availability of time for student nurses to acquire knowledge, skills and attitudes without fear of hurting patients, the availability and willingness of nurse teachers to teach, the attendance of study blocks as groups and straight off duties. During clinical area placements, the integration of theory and practice took place, and there were opportunities for student nurses to apply the knowledge and skills they learnt during study blocks and to work as members of health teams.

The negative aspects of the study blocks that were identified included too much theory content taught in each study block, inadequate demonstrations, a shortage of nurse teachers, no periods for individual study, a theory-practice gap and the too-frequent use of the formal lecture teaching method. The negative aspects of the clinical area placements included the inadequate teaching/supervision of student nurses, excessive night duties for student nurses, a shortage of qualified staff, clinical allocation of student nurses not based on study block content, inadequate clinical teaching by nurse teachers,
and unplanned clinical teaching. Most clinical teaching was performed by peers and the most junior professional nurses.

Key Terms
Block system, nursing education systems, perceptions of students and supervisors, positive and negative aspects, learning environment, classroom teaching, clinical teaching, teaching methods, adult learning theory and nursing education, block system plan
DEDICTION

I dedicate this thesis to my late dear father, Mr Kephas Noah Nyamasvisva, who did not live to witness the completion of this thesis.

His interest and enthusiasm in the education of all his children is greatly cherished and appreciated.
ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to my promoter, Dr U.U. Albernts, for her tireless efforts in guiding, assisting and encouraging me during all the phases of this study.

I would like to acknowledge the contributions, which were made by the late Professor M. Beukes, my former co-promoter, who passed away during the early stages of the study (1996).

I thank Professor H.I.L. Brink very much for agreeing to be my co-promoter and for her guidance.

I would also like to extend my appreciation to the following people who played various roles in helping me to complete this study:

- Talana Burger, the subject librarian at UNISA
- Miss R. Marovatsanga and Miss K. Mungoshi, who conducted the interviews
- Mrs S. Muller and Mr Rusakaniko, who undertook statistical analysis of the data. Mrs Muller also constructed some of the graphs.
- Mrs M. Guri, who typed some of the early drafts of the first few chapters and questionnaires.
- Mrs C. Gambiza, who typed the whole thesis as well as constructing the graphs. I thank her for her patience, as she must have typed the thesis more than twice.
- Mr R. Loveday who edited the thesis.
- Student nurses, nurse teachers, clinical instructors, sisters in charge of wards/units in Harare, Parirenyatwa, Mpilo and United Bulawayo
Hospitals, as well as community health nurses of Mashonaland East Province, all of whom participated in the study.

I thank my husband, Misheck, who supported and encouraged me throughout the whole period of this study. I am very grateful for the support I received from my four children, Ruth, Tendai, Tinashe and Rumbidzai.

Last but not least, I thank God, the Almighty Father, who made everything possible for me.
## TABLE OF CONTENTS

### CHAPTER 1
**INTRODUCTION AND ORIENTATION TO THE STUDY**

1.1 Introduction and background ........................................ 1
1.2 Statement of the problem ............................................ 5
1.3 Purpose of the study .................................................. 6
1.4 Objectives of the study ............................................... 6
1.5 Significance of the study ............................................. 7
1.6 Scope of the study ..................................................... 8
1.7 Theoretical framework ................................................. 9
1.8 Ethical considerations ................................................ 9
1.9 Research methodology ................................................ 10
1.10 Definition of the terms used in the study ......................... 11
1.11 Outline of the study .................................................. 14
1.12 Summary ............................................................... 15

### CHAPTER 2
**LITERATURE REVIEW**

2.1 Introduction ............................................................ 16
2.2 Systems used in nursing education .................................. 17
2.3 The block system ....................................................... 18
   2.3.1 Advantages of the block system ............................... 23
   2.3.2 Disadvantages of the block system ......................... 24
2.4 The modular system ................................................... 26
   2.4.1 Advantages of the modular system ......................... 28
   2.4.2 Disadvantages of the modular system ....................... 29
2.5 Other systems that are not commonly used ....................... 31
2.6 The study day system ................................................ 31
CHAPTER 3
THE CENTRALITY OF THE TEACHING AND LEARNING ENVIRONMENT IN NURSING EDUCATION

3.1 Introduction 42
3.2 Learning 42
3.3 Teaching 45
3.4 The clinical teaching process 47
3.5 The teaching and learning environment in the classroom 50
  3.5.1 The physical classroom environment and the social Classroom environment 53
  3.5.2 Nurse teacher characteristics and behaviours which Promote learning in the classroom 56
  3.5.3 The role and responsibilities of the nurse teacher 58
  3.5.4 Constraints on the role of the nurse teacher 62
3.6 Clinical teaching and learning 64
  3.6.1 The clinical learning environment 64
  3.6.1.1 Stress and anxiety in the clinical environment 65
3.7 Educators in clinical teaching/instruction 68
  3.7.1 Clinical teacher characteristics and behaviours which promote learning in the clinical areas 68
  3.7.2 The roles and responsibilities of the clinical teacher/instructor 70
| 3.7.3  | Constraints in the clinical teacher's role | 72  |
| 3.7.4  | Characteristics and behaviours of an effective ward sister | 74  |
| 3.7.5  | The teaching roles and responsibilities of the ward sister | 77  |
| 3.7.6  | Constraints on the ward sister's roles and responsibilities | 78  |
| 3.8    | Summary | 80  |

**CHAPTER 4**

**THEORETICAL FRAMEWORK**

| 4.1    | Introduction | 82  |
| 4.2    | The adult learning theory | 82  |
| 4.3    | Application of the adult learning theory in nurse education | 85  |
| 4.4    | Assumptions and principles underlying the adult learning theory | 87  |
| 4.4.1  | Changes in self-concept | 87  |
| 4.4.2  | The role of experience | 91  |
| 4.4.3  | Readiness to learn | 95  |
| 4.4.4  | Orientation to learning | 97  |
| 4.5    | The role of the facilitator | 100 |
| 4.6    | Concept map: Andragogy: Implications for education practice and effect on learning | 102 |
| 4.7    | Summary | 103 |

**CHAPTER 5**

**RESEARCH METHODOLOGY**

<p>| 5.1    | Introduction | 105 |
| 5.2    | Research problem | 105 |
| 5.3    | Purpose of the study | 106 |
| 5.4    | Objectives of the study | 106 |
| 5.5    | Research design | 107 |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.6</td>
<td>Time period of the research study</td>
<td>108</td>
</tr>
<tr>
<td>5.7</td>
<td>Research instruments and their design</td>
<td>108</td>
</tr>
<tr>
<td>5.7.1</td>
<td>Validity and reliability</td>
<td>110</td>
</tr>
<tr>
<td>5.7.1.1</td>
<td>Validity</td>
<td>110</td>
</tr>
<tr>
<td>5.7.1.2</td>
<td>Reliability</td>
<td>110</td>
</tr>
<tr>
<td>5.7.1.3</td>
<td>Pretesting of the questionnaires</td>
<td>111</td>
</tr>
<tr>
<td>5.8</td>
<td>The setting</td>
<td>111</td>
</tr>
<tr>
<td>5.9</td>
<td>Population and sample</td>
<td>112</td>
</tr>
<tr>
<td>5.9.1</td>
<td>Sampling design</td>
<td>112</td>
</tr>
<tr>
<td>5.9.1.1</td>
<td>Student nurses</td>
<td>112</td>
</tr>
<tr>
<td>5.9.1.2</td>
<td>Supervisors</td>
<td>113</td>
</tr>
<tr>
<td>5.10</td>
<td>Ethical considerations</td>
<td>116</td>
</tr>
<tr>
<td>5.11</td>
<td>Data collection process</td>
<td>117</td>
</tr>
<tr>
<td>5.11.1</td>
<td>Structured interviews</td>
<td>117</td>
</tr>
<tr>
<td>5.11.1.1</td>
<td>Training of interviewers</td>
<td>117</td>
</tr>
<tr>
<td>5.11.2</td>
<td>Self-administered questionnaires</td>
<td>118</td>
</tr>
<tr>
<td>5.12</td>
<td>Data management</td>
<td>120</td>
</tr>
<tr>
<td>5.13</td>
<td>Results</td>
<td>121</td>
</tr>
<tr>
<td>5.14</td>
<td>Summary</td>
<td>121</td>
</tr>
</tbody>
</table>
CHAPTER 6
PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA OF
STUDENT NURSES’ PERCEPTIONS OF THE BLOCK SYSTEM

6.1 Introduction 122
6.2 Findings 123

Section A: Biographical Information

Item 1: Gender 124
Item 2: Age 124
Item 3: Marital status 125
Item 4: Number of children 125
Item 5: Stage of training 127
Item 6: Training school 128

Section B: Student nurses’ perceptions of the block system

Item 7: Meaning of the block system 128
Item 8: Positive aspects of the block system 129
Item 9: Negative aspects of the block system 138
Item 10a: Organization of study blocks 150
Item 10b: Organization of clinical area placements 154
Item 11a: Extent to which specific teaching methods are used
during study blocks 158
Item 11b: Extent of use of specified teaching methods during
clinical area placements 163
Item 12: The extent to which student nurses were assisted to learn
by specific categories of staff 167
Item 13: How their last study block prepared student nurses
for their responsibilities in the clinical area placement to
which they were subsequently allocated 171
Item 14a: Learning atmosphere during study blocks
Item 14b: Learning atmosphere during clinical area placements
Item 15a: Linking of theory and practice during study blocks
Item 15b: Linking of theory and practice during clinical area placements
Item 16: Provisions for student nurses to do individual study during clinical area placements
Item 17: Suggestions about how to improve the block system

6.3 Summary

CHAPTER 7
PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS FROM NURSE TEACHERS

7.1 Introduction

7.2 Section A: Biographical information
Item 1: Gender
Item 2: Age
Item 3: Place of work
Item 4: Experience as a qualified nurse teacher
Item 5: Professional qualifications

Section B: Perceptions of nurse teachers with regard to the block system
Item 6: Meaning of the block system
Item 7: Positive aspects of study blocks and clinical area placements
Item 8: Negative aspects of the block system
Item 9a: Organisation of study blocks 231
Item 9b: Organisation of clinical area placements 235
Item 10a: The extent to which specific teaching methods are used in study blocks 240
Item 10b: The extent to which specific teaching methods are used during clinical area placements 245
Item 11: Clinical teaching during clinical area placements 250
Item 12: Preparation of student nurses for clinical area responsibilities 253
Item 13: Provisions made for student nurses to do individual study during clinical area placements 256
Item 14: Guidance and support given to clinical area staff 260
Item 15: Communication between the school of nursing and clinical area staff 263
Item 16: Suggestions on how to improve study blocks and clinical area placements 270

7.3 Summary 277

CHAPTER 8
PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS OF CLINICAL SUPERVISORS’ PERCEPTIONS OF THE BLOCK SYSTEM

8.1 Introduction 280

8.2 Section A: Biographical information
   Item 1: Gender 282
   Item 2: Age. 283
   Item 3: Hospital/place of employment. 284
   Item 4: Years of nursing experience. 285
   Item 5: Number of years involved in teaching and supervision of
student nurses.  
Item 6: Department/ward of clinical supervisors.  
Item 7: Professional qualifications.

Section B: Clinical supervisors' perceptions about the block system

Item 8: Understanding of the block system  
Item 9: Positive aspects of the study block and clinical area placement system  
Item 10: Negative aspects of the study block and clinical area placement system  
Item 11a: Organisation of study blocks.  
Item 11b: Organisation of clinical area placements.  
Item 12: Extent of the use of listed teaching methods.  
Item 13: Clinical teaching/supervision of student nurses during clinical area placements.  
Item 14: Theoretical background for clinical area responsibilities  
Item 15: Assistance given to student nurses during the process of linking theory and nursing practice.  
Item 16: Provisions for individual student learning  
Item 17: Preparation for teaching/supervision of student nurses.  
Item 18: Guidance and support given to clinical supervisors by nurse teachers.  
Item 19: Communication between the school of nursing staff (nurse teachers) and clinical supervisors.  
Item 20: Suggestions as to how the block system could be improved.

8.3 Summary.
CHAPTER 9

PERCEPTIONS OF STUDENT NURSES, NURSE TEACHERS AND CLINICAL SUPERVISORS

9.1: Introduction 357
9.2: Comparison of questionnaire findings 357
Item 1: The meaning of the block system. 357
Item 2a: Organization of study blocks. 359
Item 2b: Organization of clinical area placements. 362
Item 3a: Use of teaching methods during study blocks. 364
Item 3b: Use of teaching methods during clinical area placements. 367
Item 4: The cadre who teaches/supervises student nurses during clinical area placements. 369
Item 5a: Positive aspects of study blocks. 372
Item 5b: Positive aspects of clinical area placements. 375
Item 6a: Negative aspects of study blocks. 376
Item 6b: Negative aspects of clinical area placements. 379
Item 7: How study blocks prepare students nurses for clinical responsibilities. 382
Item 8: Linking of theory and practice. 384
Item 9: Provisions made for student nurses to do individual study. 388
Item 10: Guidance and support given to clinical supervisors. 389
Item 11: Communication between the school of nursing and clinical supervisors. 393
Item 12a: Suggestions for improving study blocks. 396
Item 12b: Suggestions for improving clinical area placements. 399

9.3 Summary 402
CHAPTER 10

SUMMARY, FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND CONTRIBUTIONS OF THE STUDY

10.1 Introduction 406
10.2 Literature review 408
10.3 Methodology 413
10.4 Findings and Conclusions 413
10.4.1 Understanding the meaning of block system 413
10.4.2 Positive aspects of the block system 414
10.4.3 Negative aspects of the block system 417
10.4.4 Managerial and teaching techniques used by supervisors in the block system 420
10.5 Limitations 424
10.6 Recommendations 425
10.7 Recommendations for Further Study 427
10.8 Contributions of the Study 427
10.9 Closing Comments 428

BIBLIOGRAPHY 429
LIST OF TABLES

Page
Table 5.1 Categories of student nurses and supervisors 114
Table 5.2 Number of respondents 115
Table 6.1: Frequency distribution of student nurses’ responses to the number of children 126
Table 6.2: Student nurses’ responses with regard to whether study blocks were organized to promote teaching and learning 150
Table 6.3: Student nurses responses with regard to whether clinical area placements were organized to promote student teaching and learning 155
Table 6.4: Use of student-led discussions by training school during study blocks 161
Table 6.5 Student nurses’ responses about whether their last study block prepared them for their clinical responsibilities in the clinical area to which they were subsequently allocated 171
Table 6.6: Student nurses’ responses with regard to whether the atmosphere during study blocks promoted their learning 174
Table 6.7: Student nurses’ responses with regard to whether the atmosphere during clinical area placements promoted their learning 179
Table 6.8: Student nurses’ responses with regard to whether they were assisted to link theory and practice during study blocks 184
Table 6.9: Student nurses’ responses about whether they were assisted to link theory and practice during clinical area placements 188
Table 6.10: Student nurses’ responses about whether provisions were
made for them to do individual study during clinical area placements.

Table 7.1: Distribution of nurse teachers by professional qualifications

Table 7.2: Nurses teachers' responses with regard to whether study blocks are organised in such a way as to promote student nurses' teaching and learning

Table 7.3: Nurse teachers' responses with regard to whether clinical area placements are organised in such a way as to promote student nurses' teaching and learning

Table 7.4: Nurse teachers' responses about whether student nurses have the theoretical background for clinical responsibilities

Table 7.5: Nurse teachers' responses about whether they had made any provisions for student nurses to do individual study during their clinical area placements

Table 7.6: Nurse teachers' responses about whether they give guidance and support to clinical supervisors

Table 8.1: Distribution of clinical supervisors according to professional qualifications.

Table 8.2: Clinical supervisors' perceptions about whether study blocks are organized in a way that facilitates the education of student nurses.

Table 8.3: Clinical supervisors' opinions about whether clinical area placements are organized in a way that promotes the teaching and learning of student nurses

Table 8.4: Clinical supervisors' opinions about whether student nurses had a theoretical background commensurate with their responsibilities during clinical area placements

Table 8.5: Clinical supervisors' opinions about whether student
nurses were assisted to link theory and nursing practice. 326

Table 8.6: Clinical supervisors’ opinions about whether they make provisions for individual student learning during clinical placements. 330

Table 8.7: Clinical supervisors’ opinions about whether they were adequately prepared to supervise/teach student nurses. 334

Table 8.8: Clinical supervisors’ responses with regard to whether nurse teachers help them with the guidance and support they need to promote the training and education of student nurses. 339
LIST OF FIGURES

Figure 6.1  Age and gender distribution of student nurses 124
Figure 6.2: Distribution of student nurses by stage of training and training schools 127
Figure 6.3: Percentage distribution of student nurses’ responses about the meaning of the block system 128
Figure 6.4: Student nurses’ responses with regard to positive aspects of study blocks 130
Figure 6.5: Student nurses’ responses with regard to positive aspects of clinical area placements 134
Figure 6.6: Percentage distribution of student nurses’ responses with regard to negative aspects of the study blocks which do not promote teaching and learning 138
Figure 6.7: Percentage distribution of student nurses’ responses with regard to the negative aspects of clinical area placements 144
Figure 6.8: Percentage distribution of student nurses’ responses with regard to how the organization of study blocks helps their learning 151
Figure 6.9: Student nurses’ responses with regard to how the organization of study blocks helps their learning 153
Figure 6.10: Student nurses’ responses with regard to how the organization of clinical area placements helps their learning 156
Figure 6.11: Student nurses’ responses with regard to how the organization of clinical area placements does not help their learning 157
Figure 6.12: Student nurses’ responses about the extent to which specific teaching methods are used during study blocks 159
Figure 6.13: Student nurses’ responses about the extent to which specified teaching methods were used during clinical area placements

Figure 6.14: Student nurses’ responses about the extent to which specific categories of staff assisted them to learn during clinical area placements

Figure 6.15: Percentage distribution of student nurses’ responses with regard to the reasons why the preceding block did not prepare them for clinical responsibilities

Figure 6.16: Student nurses’ responses about how the atmosphere during study blocks promoted their learning

Figure 6.17: Student nurses’ responses about how the atmosphere during study blocks did not promote their learning

Figure 6.18: Student nurses’ responses with regard to how the atmosphere during clinical area placements promoted their learning

Figure 6.19: Student nurses’ perceptions of how the atmosphere during clinical area placements did not promote their learning

Figure 6.20: Responses given by student nurses to explain how they perceived theory and practice to be linked during study blocks

Figure 6.21: Student nurses’ suggestions as to what should be done to assist them to link theory and practice during study blocks

Figure 6.22: Student nurses responses about how they are assisted to link theory and practice

Figure 6.23: Student nurses’ responses about what should be done to assist student nurses to link theory and practice during clinical placements
Figure 6.24: Percentage distribution of the responses of student nurses who felt that provisions were made for them to do individual study during clinical placements 194

Figure 6.25: Percentage distribution of student nurses’ responses with regard to the provisions for individual study which they perceived to be absent from clinical placements 196

Figure 6.26: Student nurses’ responses containing suggestions about how to improve the teaching and learning of student nurses during study blocks 198

Figure 6.27: Student nurses’ responses containing suggestions to improve teaching and learning during clinical placements 201

Figure 7.1: Percentage distribution of nurse teachers by gender 210

Figure 7.2: Percentage distribution of nurse teachers by age 211

Figure 7.3: Percentage distribution of nurse teachers by place of work 212

Figure 7.4: Years of experience as a nurse teacher 213

Figure 7.5: Nurse teachers’ responses with regard to their understanding of the term “block system” 216

Figure 7.6: Nurse teachers’ responses with regard to the positive aspects of study blocks 218

Figure 7.7: Nurse teachers’ responses with regard to the positive aspects of clinical area placements 221

Figure 7.8: Nurse teachers’ responses with regard to the negative aspects of study blocks 224

Figure 7.9: Nurse teachers’ responses with regard to the negative aspects of clinical area placements 228

Figure 7.10: Nurse teachers’ responses with regard to how the organisation of study blocks helped the teaching and learning of student nurses 233

Figure 7.11: Nurse teachers’ opinions about how the organisation
of study blocks does not promote student teaching and learning

Figure 7.12: Nurse teachers’ opinions about how the organisation of clinical area placements helps the teaching and learning of student nurses 234

Figure 7.13: Nurse teachers perceptions of how the organisation of clinical area placements did not help the teaching and learning of student nurses 237

Figure 7.14: Nurse teachers’ responses about the extent to which they used specific teaching methods in study blocks 238

Figure 7.14.1: Nurse teachers’ justifications for their ratings of the given teaching methods 240

Figure 7.14.2: Nurse teachers’ responses with regard to the teaching methods they would have used in study blocks if there had been no constraints 242

Figure 7.15: Nurse teachers responses about the extent to which they used specific teaching methods during clinical area placements 244

Figure 7.15.1: Nurse teachers’ justifications of their ranking of teaching methods used during clinical placements 246

Figure 7.15.2: Nurse teachers’ preferences with regard to the methods they would use in clinical area placements if there were no constraints 248

Figure 7.16: Nurse teachers’ ratings of the extent to which they carry out bedside or clinical teaching during student nurses’ clinical area placements 250

Figure 7.17: Nurse teachers’ comments about the extent to which they conduct bedside/clinical teaching during student
nurses' clinical area placements

Figure 7.18: Nurse teachers' reasons for believing that student nurses have the theoretical background for clinical responsibilities

Figure 7.19: Nurse teachers' responses with regard to the provisions they make for student nurses to do individual study.

Figure 7.20: Nurse teachers' reasons for not making provisions for student nurses to do individual study

Figure 7.21: Nurse teachers' responses about what they do to guide and support ward staff

Figure 7.22: Nurse teachers' ratings of the communication between the school of nursing and clinical area staff

Figure 7.23: Nurse teachers' justifications of their rating of the communication between the school of nursing and clinical area staff

Figure 7.24: Nurse teachers' reasons for believing that communication between the school of nursing and clinical area staff was poor

Figure 7.25: Nurse teachers' suggestions on how to improve communication

Figure 7.26: Nurse teachers' suggestions about how to improve study blocks

Figure 7.27: Nurse teachers' suggestions about how to improve clinical area placements

Figure 8.1: Percentage distribution of clinical supervisors according to gender.

Figure 8.2: Percentage distribution of clinical supervisors by age.

Figure 8.3: Percentage distribution of clinical supervisors
according to place of work. 284

Figure 8.4: Percentage distribution of clinical supervisors according to years of nursing experience. 286

Figure 8.5: Percentage distribution of clinical supervisors according to years involved in teaching and supervision of student nurses. 287

Figure 8.6: Distribution of clinical supervisors in terms of the department/ward of which they were in charge 289

Figure 8.7: Clinical supervisors' responses about whether they understood the meaning of "the block system". 292

Figure 8.8: Clinical supervisors' identification of positive aspects of the study block system used in student nurse education. 293

Figure 8.9: Clinical supervisors' identification of the positive aspects of the clinical area placement system which is used in the education of student nurses. 296

Figure 8.10: Clinical supervisors' identification of negative aspects of the study block system, which obstruct the education of student nurses. 299

Figure 8.11: Clinical supervisors' perceptions of the negative aspects of the clinical area placement system, which obstruct the education of student nurses 303

Figure 8.12: Clinical supervisors’ perceptions about how the organization of study blocks promotes student teaching and learning 310
Figure 8.13: Clinical supervisors’ reasons for believing that the organization of study blocks does not promote student teaching and learning.

Figure 8.14: Clinical supervisors’ opinions about how the organization of clinical area placements promoted student teaching and learning.

Figure 8.15: Reasons why some clinical supervisors felt that clinical area placements were not well organized.

Figure 8.16: Clinical supervisors’ estimations of the extent to which the listed teaching methods were used in their wards/clinical areas.

Figure 8.17: Clinical supervisors’ identification of the grade of cadres who teach/supervise student nurses during their time in clinical placements.

Figure 8.18: Clinical supervisors’ opinions about what student nurses lacked as they attempted to cope with their clinical responsibilities.

Figure 8.19: Clinical supervisors’ opinions about what is done to link theory and practice.

Figure 8.20: Clinical supervisors’ reasons for believing that student nurses were not assisted to link theory and practice during clinical area placements.

Figure 8.21: Clinical supervisors’ responses about the provisions they make to encourage students to do individual study.
Figure 8.22: Clinical supervisors’ reasons for believing that they
do not make provision for individual student learning. 333

Figure 8.23: Clinical supervisors’ explanations about how they
were prepared for the teaching/supervision of
student nurses. 335

Figure 8.24: Clinical supervisors’ suggestions about what they would
have wanted to prepare them for their teaching/
supervisory role 337

Figure 8.25: Clinical supervisors’ descriptions of the guidance and
support given to them by nurse teachers. 340

Figure 8.26: Clinical supervisors’ reasons for believing that nurse
teachers do not give them guidance and support. 341

Figure 8.27: Distribution of clinical supervisors’ responses which
rated the communication between the school of nursing
and clinical supervisors. 343

Figure 8.28: Clinical supervisors’ justifications for rating communication
between nurse teachers and clinical supervisors positively. 344

Figure 8.29: Clinical supervisors’ justifications for rating communication
between nurse teachers and clinical supervisors negatively. 345

Figure 8.30: Clinical supervisors’ suggestions about how to improve the
teaching and learning of student nurses during study blocks. 347

Figure 8.31: Clinical supervisors’ suggestions about how to improve the
teaching and learning of student nurses during clinical area
placements. 350

Figure 9.1: Percentage distribution of student nurses’, nurse
teachers’ and clinical supervisors’ responses with regard
to their understanding of what the block system means.

Figure 9.2a: Percentage distribution of student nurses’, nurse teachers’ and clinical supervisors’ responses with regard to the organization of study blocks.

Figure 9.2b: Percentage distribution of student nurses’, nurse teachers’ and clinical supervisors’ opinions about the organization of clinical area placements.

Figure 9.3a: Percentage distribution of responses from student nurses and nurse teachers about the frequency with which the specified teaching methods are used in study blocks.

Figure 9.3b: Percentage distribution of responses from student nurses, nurse teachers and clinical supervisors about the frequency with which the specified teaching methods are used in clinical areas.

Figure 9.4: Percentage distribution of student nurses’ and clinical supervisors’ responses with regard to the grade of cadre who supervises/teaches student nurses during clinical area placements.

Figure 9.5a: Percentage distribution of responses by student nurses, nurse teachers and clinical supervisors with regard to the positive aspects of study blocks.

Figure 9.5b: Percentage distribution of responses by student nurses, nurse teachers and clinical supervisors with regard to the positive aspects of clinical area placements.

Figure 9.6a: Percentage distribution of responses of clinical supervisors, nurse teachers, and student nurses with regard to the negative aspects of study blocks.

Figure 9.6b: Percentage distribution of responses by student nurses, nurse teachers and clinical supervisors with
regard to the negative aspects of clinical area placements. 380

Figure 9.7: Percentage distribution of the responses of clinical supervisors, nurse teachers and student nurses with regard to whether student nurses have an adequate theoretical background for their clinical responsibilities. 383

Figure 9.8a: Percentage distribution of the opinions of student nurses and clinical supervisors about whether student nurses were assisted to link theory and practice during clinical placements. 385

Figure 9.8b: The responses of student nurses and clinical supervisors about the kind of activities that assist student nurses to link theory and practice during clinical area placements. 386

Figure 9.9: Percentage distribution of the opinions of student nurses, nurse teachers and clinical supervisors about whether provision is made for students to do individual study. 388

Figure 9.10a: The opinions of nurse teachers and clinical supervisors about whether guidance and support is given to clinical staff by nurse teachers 390

Figure 9.10b: What nurse teachers do to guide and support clinical supervisors. 392

Figure 9.11: Percentage distribution of how nurse teachers and clinical supervisors rated communication between the school and clinical area staff. 394

Figure 9.12a: Percentage distribution of the opinions of student nurses, nurse teachers and clinical supervisors about how study blocks might be improved 397
Figure 9.12b: Percentage distribution of the suggestions made by student nurses, nurse teachers and clinical supervisors about how clinical area placements could be improved
Appendices
1. Questionnaire 1
2. Questionnaire 2
3. Questionnaire 3
4. Draft Plan for The National General Nursing Block System for Schools of Nursing in Zimbabwe
5. Request for Permission to Conduct the Study in Harare Hospital
6. Request for Permission to Conduct the Study in Mpilo Hospital
7. Request for Permission to Conduct the Study in United Bulawayo Hospital
8. Request for Permission to Conduct the Study in Mashonaland East Province
9. Request for Permission to Conduct the Study in Parirenyatwa Hospital
10. Permission to Conduct the Study in Harare Hospital
11. Permission to Conduct the Study in Mpilo Hospital
12. Permission to Conduct the Study in United Bulawayo Hospital
13. Permission to Conduct the Study in Mashonaland East Province
14. Permission to Conduct the Study in Parirenyatwa Hospital
CHAPTER 1

INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND

In the Republic of Zimbabwe, the government is the main provider of health care services. It provides such services through the Ministry of Health and Child Welfare by allocating resources for national health care, promoting the development of health professionals and employing staff to engage in health care research. The Ministry of Health and Child Welfare regards the provision of high-quality nurse education as its main responsibility because the training and development of skilled professional nurses are indispensable for a successful health care system. The main nurse training institutions are Harare and Parirenyatwa Hospitals in the city of Harare, and Mpilo and United Bulawayo Hospitals in the city of Bulawayo. In 1997, smaller provincial schools of nursing also began to offer general nurse training at the diploma level for the first time.

The majority of professional nurses who work in the health care system have a Diploma in General Nursing as their basic qualification. The Diploma in General Nursing is a hospital-based qualification, and the block system of nurse education is used to educate and train student nurses.

Nurse training utilises the apprenticeship system of nurse training. This means that student nurses are employed by the hospitals and receive a monthly salary while they are being trained as nurses. Student nurses therefore render nursing service to the public and acquire clinical
experience by working in a hospital or community clinical environment during their training. In such a system, student nurses are required to deliver competent nursing services in hospital wards because they are part of the nursing staff of the hospital in which they are being trained. The great advantage of this system is that it gives student nurses the opportunity to be employed in an environment where they receive in-depth exposure to actual clinical and patient-care situations. In addition, they are also exposed to the actual conditions under which nurses work because they are required to work all shifts – including weekends and evening and night shifts. The benefit which hospitals receive from this arrangement is that they are simultaneously provided with additional nursing staff for patient care.

The apprenticeship system of nurse education used in Zimbabwe was originally modelled on the British system of nurse training. Hospitals using this kind of apprenticeship system depend on the employment of learners to implement patient care (Proctor 1983, cited by Mashaba 1994:306). Davies (1983, cited by Mashaba 1994:306) points out that as one cohort of trainees completes its training, another cohort of novices moves in to take its place. Student nurses are therefore required to comply with various service as well as educational requirements. In practice, this means that the learning needs of student nurses do not receive priority over the service needs of hospitals.

An ideal approach would be one in which the services rendered by student nurses are dictated by their educational needs. According to McMillan and Dwyer (1989), cited in Mashaba (1994:307), the student nurse should ideally be independent of hospital service for the first two years of training. A conflict of interest may arise between the legitimate need that patients have for practical nursing care in a hospital and the demands that a student
nurse’s educational training make on her time as a student who is studying
more theoretical issues (Wyatt 1978:264).

The block system is used for classroom teaching as well as for clinical
experience. The programme runs over a period of 156 weeks. Of these 156
weeks, 38 weeks are devoted to study blocks, 106 weeks are devoted to
clinical experience, and 12 weeks are allocated for leave. The bulk of the
student nurse’s training period (more than two thirds) is therefore spent in
the clinical setting, while the remaining time is spent in the classroom.

The study blocks are arranged in such a way that the content which is
allocated to a particular study block is completed in that study block. The
three-year programme comprises 6 study blocks. There are two 8 week
study blocks in the first year, two 8 week study blocks in the second year
and two study blocks of 4 weeks and 2 weeks duration respectively, in the
third year.

A number of clinical experience blocks are situated between study blocks.
These range from between 18 and 20 weeks in the three years of nurse
training. In the periods that are allocated as clinical experience blocks,
student nurses are assigned to various clinical settings in rotation for
varying periods of time. The length of time taken up by clinical experience
blocks generally ranges between 4 and 8 weeks.

The intervals between the study blocks and clinical experience blocks range
from between 17 and 36 weeks. They are arranged in the following way:
There is a gap of 17 weeks between the Introductory and First Study
Blocks; 34 weeks between First and Second Study Blocks; 29 weeks
between the Second and Third Study Blocks; 16 weeks between the Third and Fourth Study Blocks, and 18 weeks between the Fourth and State Final Study Blocks.

There are three intakes of student nurses each year, and these take place in January, May and September. As one group of student nurses completes its training, a new group commences its training. This system ensures that a constant total number of student nurses are available in the training hospitals at all times.

An autonomous statutory body called the Health Professions Council controls nursing education in Zimbabwe. The Health Professions Council prescribes syllabuses, inspects and approves nurse-training institutions, conducts examinations and acts as the registering body for professional nurses. The Health Professions Council Nurse Training Regulations stipulate both entry and registration requirements.

Student nurses are selected for training from all parts of the country and prospective candidates may apply to the institutions of their choice. A panel that consists of both nurse educators and practitioners from the service area interviews the short-listed candidates. The candidates who, in the opinion of the panel, appear to be most suitable and best qualified for nurse education, are accepted.
1.2 STATEMENT OF THE PROBLEM

It has become apparent that the current apprenticeship system described for educating nurses towards a diploma in general nurse training by means of the programme that uses the block system of nurse education and training in Zimbabwe, is deficient and inadequate in various ways. These deficiencies and inadequacies are evident both in the teaching of nurses and the kind of learning that student nurses undertake during their training for their diplomas. These problems become too obvious to be ignored when student nurses reach the end of study block, the end of clinical area placement and the end of training discussions and evaluations. There is anecdotal evidence to suggest that it is the ineffectiveness and inadequacy of teaching that may be the cause of the high failure rates of nurses in both the examinations that test their theoretical knowledge and in the practical assessments that investigate their clinical skills. These high failure rates are the direct cause of “back grouping” and also of the high attrition rate among student nurses.

Criticisms of the block system have been documented in the literature. Jacka and Lewin (1986:679) note that study blocks could become cramming periods and that most teaching during study blocks utilises the "didactic" or “lecture room” model – a method of teaching which may aggravate the difficulties which students experience when they try to adapt and apply the theoretical knowledge which they acquire in the lecture room into practical clinical settings. A further aggravating factor is that little attempt is made to match the theoretical content which student nurses acquire and their clinical placements at the time of acquisition (Jacka & Lewin 1986:680). Another problem which has been noted is that nurse
teachers seldom teach in actual clinical settings (Reid 1985) and that student nurses receive very little clinical supervision from either their nurse teachers or from the clinical staff (Fretwell 1983; Clinton 1985; Jacka & Lewin 1987). The research of both Alexander (1984) and Jacka and Lewin (1986:574) reveals that student nurses spend very little time with professional staff during clinical placements and that they receive very little teaching while working in the wards.

In view of the above problems, for which there is a great deal of *prima facie* evidence but no substantiated and documented research in Zimbabwe, it is both important and timely to conduct systematic research into the perceptions of both student nurses and their supervisors with regard to the block system that is currently being used in the general nurse diploma programme.

### 1.3 PURPOSE OF THE STUDY

The purpose of this study is to examine the perceptions which student nurses, nurse teachers and clinical supervisors have of the block system in order to identify both the positive and negative aspects of this system as it is currently being implemented in the general nurse diploma programme in Zimbabwe.

### 1.4 THE OBJECTIVES OF THE STUDY

This study seeks to identify and describe a number of issues and problems that might be inherent in the block system — as these are perceived by both student nurses and their supervisors. The study therefore seeks to:
• determine what the student nurses' and supervisors' perceptions of the meaning of the block system are.

• identify those positive aspects of the block system that enhance the teaching and learning of student nurses – as these are perceived by both student nurses and their supervisors.

• identify those negative aspects of the block system that diminish the quality of teaching and learning of student nurses – as these are perceived by both student nurses and their supervisors.

• identify the managerial and teaching techniques that are used by nurse teachers and other supervisors when they act as facilitators within the block system – and how both student nurses and their supervisors perceive such techniques.

1.5 SIGNIFICANCE OF THE STUDY

The study findings could benefit nurse education and training in Zimbabwe by identifying the strengths and weaknesses of the block system as it is currently being implemented in Zimbabwe. Such an identification of the strengths and weaknesses of the block system could assist policy-makers by providing them with the hard data that they need to redesign the system in such a way that the quality of nurse education could be improved. Such an improvement in the quality of nursing education would benefit both patients and clients, and improve the self-esteem and professional effectiveness of the student nurses themselves. This close link between improvement in the quality of nurse training and the quality of patient care has been documented in the research conducted by Bendall (1975).
This study could also demonstrate whether or not the present system of nurse education and training in Zimbabwe is delivering what it was designed to deliver and – if it does not – what kind of modifications to the block system would remove its deficiencies and make it more effective. The findings of the study could very well therefore influence the decisions of those policy makers who are responsible for ensuring the quality and effectiveness of nurse education in Zimbabwe.

The findings of the study will be used to develop a draft plan for the national block system that will guide schools of nursing in their planning and implementation of the block system.

1.6 SCOPE OF THE STUDY

The study addressed issues relating to the block system as perceived by student nurses and their supervisors. The study sample included first, second and third year student nurses selected from the Harare, Parirenyatwa, Mpilo and United Bulawayo Central Hospitals. The four categories of supervisors who were included in the study are nurse teachers, clinical instructors, sisters-in-charge in the central hospitals and community health nurses in Mashonaland East Province. The results of the study could therefore be generalised because the respondents were representative of the four training institutions.
1.7 THEORETICAL FRAMEWORK

The theoretical framework that guides this study is the adult learning theory of Malcolm Knowles (1980), which describes the art and science of assisting adults to learn. Andragogy is based upon four major assumptions or principles about how adults learn. These principles are expressed in the following four statements:

1. Adults must be able to see and understand the relevance of learning skills — and they should be able to apply such skills effectively in their work situations.

2. Adult students are people who possess a wealth of accumulated knowledge, experience and well-developed skills that they have learnt in the past. Their past knowledge, experience and skills form the foundation on which they (adults) are able to build new skills.

3. The self-concept of adults requires that they be self-directed learners.

4. Adults are people who have a capacity to learn to cope with real life tasks and problems.

1.8 ETHICAL CONSIDERATIONS

Permission to conduct the study was obtained from the medical superintendents in charge of the four central hospitals and the provincial medical director in charge of Mashonaland East Province.
The researcher wrote letters to respondents. She also visited the respondents selected for the study and explained to them the nature and purpose of the study. The information that was given to them included explanations of the research title, the purpose of the research, its potential significance, the methods of data collection, the amount of time that they would be required to devote to the study, and what arrangements the researcher had made to ensure their anonymity and confidentiality.

Informed consent was obtained from each respondent after all these factors had been explained to him or her. They were all given the opportunity either to consent or to refuse to participate in the study, and no implicit or explicit pressure was exerted to encourage their participation.

The data collected was private and confidential. The names of respondents were not recorded or required on the questionnaires. This procedure ensured anonymity. The data was not made available to anybody outside the research team, which comprised the researcher, two interviewers, a data entry clerk and the statistician.

1.9 RESEARCH METHODOLOGY

The study used a cross-sectional survey research design to obtain information about the block system from the research subjects.

Three questionnaires that were designed by the researcher, were used to collect data. Structured interviews were used to collect data from nurse teachers, clinical instructors and sisters in charge in the central hospitals.
and self-administered questionnaires were used to collect data from student nurses and community health nurses. The validity of the questionnaires was established by experts in nurse education who examined the questionnaire items in order to ascertain whether the questions accurately measured what they were designed to measure. Validity and reliability were established by pre-testing the questionnaires on a small number of subjects who were not included in the study.

One group of first, second and third year student nurses from each of the four central hospitals, as well as all the supervisors in the four central hospitals and Mashonaland East Province, were included in the study because the numbers were considered to be small. The quantitative data was analysed by means of descriptive statistics. Content analysis was used for analysing the qualitative data. Figures, graphs and tables were used to display the data.

1.10 DEFINITION OF THE TERMS USED IN THE STUDY

**Perception:** Perception refers to the feelings, thoughts, attitudes, views, opinions and experiences of student nurses, nurse teachers, clinical instructors, ward / unit sisters and community sisters.

**Block System:** This is a system, which is used in nurse education. It divides the whole course into sections of theoretical instruction, and it intersperses these sections of theoretical instruction with sections of clinical practice and experience.
Study Block: This refers to a period during which student nurses are required to attend the school of nursing on a full-time basis and to attend lessons.

Clinical Area Placement/Clinical Experience Block: This is the period during which student nurses are allocated to a clinical setting so that they may obtain the necessary clinical experience.

Positive aspect: This refers to any situation characterised by the presence of features or qualities that facilitate the teaching and learning of student nurses.

Negative aspect: This refers to any situation, which is characterized by the presence of features, or qualities, which are detrimental to teaching and learning of student nurses.

Supervisors: Supervisors are professional nurses who are involved in the education and supervision of student nurses. Supervisors may be divided into the following categories:

i) Nurse teachers
ii) Clinical instructors
iii) Sisters-in-charge of units or departments
iv) Community health nurses

Nurse Teacher: A nurse teacher is a professional nurse who has trained as a nurse educator and who spends the greater portion of her time teaching in the classroom situation. He/she is also known as a nurse tutor.
Clinical Teacher/Instructor: This title refers to a professional nurse who is promoted to a position in which he/she engages in clinical teaching and spends the greater proportion of his/her time teaching student nurses in clinical settings.

Sister: A sister is a professional nurse who works in a clinical setting.

Sister-in-Charge: This title refers to a professional nurse who has been promoted to the position of head in a unit or department. He/she is also known as a ward or unit sister.

Community Health Nurse: This is a professional nurse who works in a community setting where she/he applies principles of nursing practice and public health.

Student Nurse: A student nurse is a student who is undergoing general nurse training.

Practical Assessment: This is the term used to describe the Health Professions Council’s practical examinations.

Follow-ups: These are compulsory supervised procedures that are performed prior to practical assessments.

Back grouping: This is a term used to describe the demotion of a student nurse to the next junior group after failing a repeat theory examination or practical assessment.
1.11 OUTLINE OF THE STUDY

This study is divided in the following way:

**Chapter 1:** Chapter 1 describes the background to the research, the statement of the problem, the objectives and aims of the study, the significance of the study, the scope of the study, a brief overview of the theoretical framework, ethical considerations, research methodology, definitions and descriptions of key terms (terminology) which are used in the study, as well as a brief outline of the study.

**Chapter 2:** Chapter 2 reviews the literature that describes the systems used in nurse education and the theory-practice gap in nurse education.

**Chapter 3:** Chapter 3 reviews the literature that describes the centrality and importance of the teaching and learning environment in nursing education.

**Chapter 4:** Chapter 4 discusses the theoretical framework.

**Chapter 5:** Chapter 5 describes the research design — including the techniques and methods of data collection that the researcher used.
Chapter 6: Chapter 6 discusses the methods used in the data analysis and the findings of the study for Questionnaire 1: Student Nurses.

Chapter 7: Chapter 7 discusses the methods used in data analysis and the findings of the study for Questionnaire 2: Nurse Teachers.

Chapter 8: Chapter 8 discusses the methods used in data analysis and the findings of the study for Questionnaire 3: Clinical Supervisors.

Chapter 9: Chapter 9 presents a comparison of all results (data) obtained.

Chapter 10: Chapter 10 presents the findings and conclusions of the study, as well as the researcher’s recommendations and description of the contribution, which this study makes to the field.

1.12 SUMMARY

This chapter presented the background to the study, a statement of the problem in relation to the block system, the purpose of the study, the objectives of the study, the significance of the study, and, finally, the scope of the study. In this chapter, the theoretical framework, which was used to guide the study was introduced. Ethical considerations, and a brief outline of the research methodology of the study, were also included. The most important terms (terminology) used in the study were defined. The researcher concluded the chapter with an overview of the layout of the research. The next chapter presents a literature review on systems that are used in nurse education.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION
The literature relevant to the study will be reviewed in both this chapter and the next. Most of the literature reviewed will be concerned with adult learners – with particular reference to how student nurses and supervisors perceive and understand the block system that is used in nurse education. These perceptions are the focus of this research and the researcher believes that the literature, the findings and the researcher’s final recommendations will confirm the importance, the relevance and the timeliness of this study in Zimbabwe (Rudestam & Newton 1992:46). Research of this kind is long overdue in Zimbabwe, where the block system in nurse education has been used without any major changes for over thirty years.

A review of the literature will describe what is known about the research problem and what still needs to be researched (Burns and Grove 1993:141). It will also provide the researcher with enough current information about the topic to enable her to conceptualise a theoretical framework for the study (Stevens, Schade, Chalk & Slevin 1993:67).

The literature review should in fact provide enough in-depth information about the block system in nurse education to enable the researcher to recommend the kind of changes that need to be implemented in Zimbabwe today. It should also demonstrate why a study of this kind is necessary if policy makers are to make informed decisions about the kind of nurse
education that will be needed in the Zimbabwe of the future (Batey 1977, in Burns and Grove 1993:67).

Once the researcher had clarified the research topic, she used the resources of the university library at the University of South Africa (Unisa) to identify, read and critique the literature sources. The literature search was conducted manually as well as on computer. Catalogue indexes, abstracts and bibliographies were used to identify relevant sources. Subheadings and synonyms were used to guide the search for relevant sources in catalogue listings, abstracts and bibliographies. Citations on various databases were scanned to identify sources relevant to the research problem. The researcher made use of the interlibrary loan system to obtain many of the books and articles that were locally unavailable.

The literature review is divided into two parts. These are:

- Reviews of systems, which are used in nursing education and an examination of how effective nurse educators and administrators have been in closing the theory-practice gap.
- A critical examination of the centrality of the teaching and learning environment in nursing education.

2.2 SYSTEMS USED IN NURSING EDUCATION

The aim of nursing education is to equip student nurses with whatever knowledge, skills and attitudes they need to practise competently as qualified nurses. This is achieved by subjecting student nurses to a rigorous training programme. The training programme enables student nurses to acquire theory, insight and information in the classroom and apply what they have learnt in the classroom in the practical conditions they encounter
in clinical settings. Various systems are used in nursing education. These are modular, block, study day, daily lecture release and daily concurrent theory and practice systems. The modular and block systems are frequently used.

2.3 THE BLOCK SYSTEM
The block system of nurse education was first suggested by Carter (1939:165). She suggested that student nurses would receive a better education if they alternated their ward work with periods devoted exclusively to study and lectures in the nursing school. This system of education has been extensively used in the United Kingdom for educating students in technological subjects since 1922. In South Africa, the block system in nurse education was introduced in Groote Schuur Hospital in 1943 (Searle 1965:288).

Mellish and Brink (1990:99) define the word “block” (as used in the phrase “block system”) as referring to both that section or portion of the course which is devoted to the learning of theory content by student nurses who are enrolled full time in a school of nursing as well as that section or portion of the course during which student nurses obtain practical experience in clinical settings. Dunster (1982:67-75) and Davies (1983:580) define block system courses as full-time education courses in which practical periods are interspersed among academic periods. This implies that students are given the opportunity to put the theory that they learnt in the lecture room (academic) setting into practice during other designated periods. Ideally, such practical periods should provide opportunities for students to put into practice the theory that they have just been taught in the lecture room.
Carter’s (1982:92) study of radiography courses found that student learning was more effective if the students were immediately given the opportunity to put into practice, during hospital clinical placement, what they had learnt in the lecture room. This suggests that learning is most effective if students are given opportunities to apply the knowledge they have learnt as soon as possible after being exposed to theory in the lecture room. Ideally, clinical placements should not be made before student nurses are exposed to relevant theory content in study blocks – although in practice this often happens in nurse education because patients present with such a diversity of diseases (pathology) in hospital settings. Although Davies’s (1983:580) research into the block system of teaching was directed mainly at engineering students, he believed that this method could be successfully used in all professions that have a strong practical component (such as nurse education). What Davies (1983:580) suggested, is an ideal system of education because it permits the student to relate theory to practice within a short period of time. This immediate application of theory to practice reinforces what the student has learnt in the lecture room. It optimises the processes of student learning and enhances their understanding of what they have learnt because they immediately apply it and therefore see the relevance of what they have been taught in the lecture room.

However, if a properly functioning block system is to be implemented in nurse education, there are a number of conditions that have to be met. These conditions are described by Mellish and Brink (1990:104), and they include the following:
• **Staffing**

The school of nursing and the clinical areas should be staffed with well-trained, experienced and properly qualified personnel who are interested in teaching – especially teaching in clinical settings. These professional nurses should be experts in reinforcing what students have recently been taught in the lecture room, and their coaching of students in the clinical setting should enable students to master the techniques and theory they have learnt in the lecture room. There should also be a well-defined and flexible promotional structure that will attract and retain the best teaching staff (Mellish & Brink 1990:104). Unfortunately, there is a very high rate of staff turnover especially in clinical areas in Zimbabwe – a factor that compromises the continuity of student learning and teaching. The higher rate of staff turnover is probably attributable to the unattractive conditions of service under which such professional nurses are forced to operate. Current student-tutor ratios in Zimbabwe are high which means that there are too many students for too few tutors. This in turn means that nurse teachers have to spend inordinately long hours in lecturing, marking, planning and carrying out their administrative duties. Because nurse teachers may be overwhelmed with work, they cannot devote as much time as they would like to helping student nurses to learn to integrate theory with practice in the clinical areas.

• **Communication**

School and clinical area staff should work as a team and communicate with each other about all matters of importance that affect students (Searle 1982:53-54). While it is important for school staff to always be aware of current practices in clinical areas, it is just as important for ward sisters to, be informed about what students have been taught during their study block
periods and what they are expected to learn during their clinical practice. If this kind of communication functions well, students will not be taught irrelevant or untimely theory and ward sisters will be given the opportunity to prepare suitable programmes for their students in the clinical setting. Such an arrangement obviously results in optimum learning experiences for student nurses.

- **Study block theory content**
The ideal is for student nurses to be taught the theory content that relates to their immediate areas of placement. While this is possible in teaching of theory, it is not always a straightforward matter to place student nurses in relevant clinical areas because student nurses are regarded as part of the hospital workforce in Zimbabwe, and they are placed wherever they are most needed at the time (Jacka and Lewin 1986:680). In some cases, a hospital’s staffing needs are given precedence over the student nurses’ learning needs. Thus, for example, student nurses might find themselves in medical wards immediately after they have been lectured in surgical nursing in their study blocks.

- **Allocation of students to clinical areas**
For this to be ideal, the educational needs of student nurses should be taken into account (Mellish and Brink 1990:104). In Zimbabwe, there is a senior member of the nursing school staff (the allocation officer) who allocates student nurses to clinical areas. While this officer makes every effort to place the student nurses in those clinical areas which are relevant to the theory content that they have just covered, it may not always be possible to accommodate student nurses because the needs of the hospital as a whole have to be given priority when it comes to allocation. The other reason why
student nurses cannot always be accommodated in the relevant clinical areas is that classes in Zimbabwean schools of nursing are so large that many student nurses will have to be allocated to clinical settings and wards in which they cannot apply the theory that they have just learnt in the lecture room. Large classes have become the norm in Zimbabwean nurse education situation because of the government's constant requests for an ever-greater output of professional nurses.

- Linking theory and practice
  If there is good communication between the school of nursing and clinical areas and if there are adequate number of staff in both settings, it should be relatively easy to achieve an educationally optimal linkage between theory and practice. However, in Zimbabwe clinical areas may be perpetually understaffed and some ward sisters may not be very interested in teaching. Searle (1982:52) is of the opinion that the ward personnel, clinical instructors and nurse teachers should teach student nurses in the wards and assist them to link theory with practice. This prerequisite is very important if the block system is to be successfully implemented. It should be the business of all professional nurses to assist student nurses to relate theory to practice. An interest in teaching should be one of the conditions for employment in a teaching hospital.

- Compulsory assignments during clinical attachments
  Compulsory assignments are just as important for the assessment of student nurses throughout their clinical placement as their end-of-block examinations (Mellish and Brink 1990:102). These assignments or projects should aim to relate theory to practice, and they should motivate and encourage student nurses to continue their learning during clinical
placements. According to Searle (1982:54), a conscientious integration of theory and practice and meticulous attention to the teaching of student nurses between the blocks of theory, are the features that ensure the success of the block system.

2.3.1 Advantages of the block system

The block system (if properly implemented) holds many advantages for both the student and teacher. A study of the attitudes of Salford University academic staff to “sandwich courses” (the block system) revealed that students in sandwich courses were more alert, open-minded, mature, questioning and involved (Davies 1983:582). The inference from this study was that the block system of education produced better graduates.

Carter (1982:92) confirmed that the comprehension of the course material was improved when the theory content was covered before hospital department placement for radiography students. In such cases, the students’ learning of the techniques and procedures was far more effective and the students were found to be more motivated. Bendall (1971:171) found that learning was more effective if theory instruction was given within less than six months of relevant clinical placements. The more recently theory has been taught; the easier it is to integrate it with practice. Such observations have been anecdotally confirmed in nurse education by the observation of the performance of students who are placed in clinical areas where they are familiar with the theory, which they are required to put into practice. In such cases, it is found that student nurses are both keen and highly motivated to put what they have learnt in theory into practice.

The block system affords teachers opportunities to continuously assess the academic progress of students because of the end of block examinations
and continuous clinical assessments that are a feature of the block system. Student nurses are given opportunities to relate theory to practice if they are placed in wards according to their educational needs rather than the staffing needs of the hospitals in which they are training.

Mellish and Brink (1990:102-103) and Searle (1982:52-53) found that the block system benefited the student nurses by "freeing" them from the hard and stressful physical work and the "unsociable" working hours that are characteristic of work in hospital wards and allowing them the fixed working hours and free weekends that are characteristic of those block periods during which they are lectured in theory content.

This suggests that work in clinical settings is stressful for student nurses. In addition, student nurses can use the library and audio-visual material and resources during their study blocks – something which they cannot do during their times of clinical placement as full-time hospital workers. In nursing schools with small classes, field trips, which help students to relax, can easily be arranged (Mellish and Brink 1990:102-103; Searle 1982:52-53). While this can also be done for large classes, it requires more resources in terms of time and transport because the student nurses may need to be divided into smaller groups.

2.3.2 Disadvantages of the block system

As with any other system of nurse education, the block system has certain disadvantages. Nurse educators introduced the block system because the apprenticeship system of nurse education did not give student nurses enough time for learning theory content (Fergusson & Jinks 1994). The rationale was that the block system would give student nurses the time they
needed to acquire the theory that they would put into practice in their subsequent clinical placements.

In Zimbabwe, however, clinical placements are not always related to the theory and subject content that has just been acquired because student nurses are regarded as being a part of the hospital workforce and their clinical placements are therefore made according to the hospital’s service needs. The other reason is that the classes are too large for all student nurses to be placed in relevant clinical areas. While these two problems are prevalent in the Zimbabwean situation, Smith (1982:47) also found that the ineffective integration of theory and practice was due to the student nurses’ perception that the school and clinical areas were totally divorced from each other because of their geographical separation. The failure to place student nurses to relevant clinical areas means that they get unequal learning opportunities and experiences (Jacka and Lewin 1986:679-685; General Nursing Council (Scotland, 1978), in Alexander 1983:27). This suggests that if the block system is to succeed, careful planning is needed to ensure that students receive relatively equal opportunities. Some student nurses could be allocated to a clinical area immediately before a study block – and then be given more assistance during the clinical placement.

Mellish and Brink (1990:103) and Jacka and Lewin (1986:679-680) found that the study blocks might degenerate into periods of cramming for students. The large amounts of theory that they are expected to master suggest that the learning, which occurs, may be ineffectual. Long hours of lectures and note taking are not likely to result in effective learning. Because some study blocks may have a lot of theory and subject content that has to be covered, nurse teachers may often find that they themselves
have insufficient time to keep abreast of current developments in their fields. This may cause embarrassment and even conflict between themselves and the student nurses whom they are supposed to help in the wards (Mellish and Brink 1990:102; Searle 1982:53). Student nurses who miss lectures during study block because of ill health or other legitimate reasons may find that they are not able to catch up with their group (Searle 1982:53). A well-planned curriculum, which emphasises important topics, may resolve these problems by enabling students to master essential theory and practice.

The block system of education as the researcher has defined it above can only be effective if the preconditions for its success are always included in the design of the system. If the block system is to be a success, the teaching institution must be adequately staffed, classes must be small, student nurses must be supernumerary, good communication must be maintained between school staff and clinical staff, and the curriculum must be revised and planned in such a way that it emphasises only important and essential topics in nurse training.

2.4 THE MODULAR SYSTEM
The modular system of education means that a course of study is divided into separate components or elements (i.e. "modules") (Watson 1989 in MacNeal and Cavanagh 1995:136, Bevis 1973 in Laschinger, Burke and Jerrett 1986; Shore 1973:681; Mellish & Brink 1990:108). Each element or module contains theoretical and practical learning material, which enables the student to learn and understand a single vital component of the course (Bevis 1973 in Laschinger, Burke and Jerret 1986; Shore 1973:681; Mellish & Brink 1990:108). Modular instruction may therefore be defined as instruction, which is either partly or entirely based on modules.
The learning material in each module is arranged in such a way that the theory and relevant practical experiences follow each other closely in terms of time. This makes the student nurses appreciate the relevance of either the theory or clinical experiences they have recently covered and this should motivate them to learn more. The student nurse may organize his/her time and learning relatively independently in order to achieve each module's stated goals and objectives. This makes the modular system ideal for adult students because it recognizes them as self-directed learners – unlike the block system of education, which is heavily dependent on the lecture method of teaching.

The modular system of education was introduced in the 1970s (Fergusson & Jinks 1994) in order to link theory and practice. As noted by the General Nursing Council (Scotland 1978), in Alexander (1983:28), the modular schemes required that periods of clinical experience be immediately preceded by periods of relevant instruction. This seems to indicate what has been suggested above, namely that the systems of nurse education (such as the block system), which were in use until the introduction of the modular system, were not effective in achieving an integration of theory and practice. This is probably why modular systems of education have become increasingly popular in so many countries (Mellish & Brink 1990:107). In spite of this, Alexander (1983:220) has noted that the modular system of education alone cannot adequately achieve the integration of theory and practice without the active participation of nurse teachers in the clinical areas.
2.4.1 Advantages of the modular system
The modular system of education has a number of advantages. One of its main advantages is that it motivates adult learners such as student nurses by enabling them to almost immediately relate the theory they have learnt to their clinical experiences because teaching and clinical experience are closely related in time (Jacka and Lewin 1986:53-55). Under such circumstances the student nurse is immediately afforded an opportunity to apply his/her newly acquired knowledge and skills to patient care. This is exactly what is advocated by the andragogical principles of the teaching and learning of adults – which is the basis of the present study’s theoretical framework.

Each module is complete in itself. This allows student nurses to manage their learning time –, which is not the case in the block system of education where the nurse teacher determines learning time. Because each module’s objectives are stated at the beginning of the course, the student controls the pace of his/her learning and so can successfully complete the module within the prescribed time (Goldschmid & Goldschmid 1973:17). Student nurses, like any adult learners, want to be in control of their own learning, and the modular system offers them this advantage (Allen 1967, in Shore 1973:68). The modular system is so versatile that even slow learners or those who defer their training for various reasons are not unduly disadvantaged or harassed (Burns 1971:55-56; Allen 1967, in Shore 1973:681; Searle, Brink, Beukes, DuToit & Potgieter 1980:73). Students who learn at a slow pace can repeat modules without being disadvantaged or take specially designed remedial modules without interfering with the progress of the rest of the group (Klingstedt 1971, in Goldschmid & Goldschmid 1973:17). The student is therefore in a position to direct his/her
own learning. This complies with one of the chief recommendations of the adult learning theory (Ghazi & Henshaw 1998:43) and is the theoretical ground on which the present study is based. This is in sharp contrast to what usually happens in the general nurse block system as it is implemented in Zimbabwe. Under such a system, such student nurses are sometimes under tremendous pressure to keep up with the rest of the group. However, allowing students to learn at their own pace (which is a major feature of the modular system) would not be possible in nurse education as it is currently constituted because the registering body stipulates, in its regulations, the exact time within which each course should be successfully completed.

While student nurses work through the module at their own pace, nurse teachers will also have enough time to keep abreast of new developments in nursing practice – especially on the wards (Goldschmid & Goldschmid 1973:68). This makes the nurse teacher more effective in bedside teaching (Mellish & Brink 1990:114). Both student nurses and ward sisters have criticized nurse teachers in the block system for teaching student nurses what is not being practised in the relevant clinical areas. The nurse teacher can give students individual attention because she will not have to spend time preparing lectures.

2.4.2 Disadvantages of the modular system
One of the main disadvantages of the modular system of education is that the student nurse may perceive the modules as isolated courses unless the facilitator or module developers are successful in demonstrating how each of the modular courses relate to each other (Alonso 1984:60-62). This linking of modular courses may also be misunderstood as comprising
“unnecessary” repetition – and such a perception may make students feel demotivated. This factor may adversely affect the practice of nursing by student nurses who are expected to integrate everything that they have learnt and all their skills so that they can provide total patient care. If they do not study some modules adequately because they regard them as being merely repetitive, they will miss learning important knowledge and skills.

The sudden change in pedagogical methods and the introduction of the modular system with the freedom that it gives the learner to learn at his or her own pace may not be compatible with the learning styles of some adult learners (school leavers). Independent and self-directed learning, which is the cornerstone of modularisation, requires a lot of self-discipline and time-management - skills which some adult students may not have acquired (Goldschmid & Goldschmid 1973:29-30). Unlike the block system, where a few nurse teachers can adequately teach large groups of student nurses, the modular system may be difficult to implement in Zimbabwe, where the classes are large and only a few nurse teachers have to teach the wide range of topics that comprise total patient care.

Far more assessments have to be made in the modular system of education because each module is an independent unit of the course that has to be assessed and passed before one can qualify as a professional nurse (Howard 1995:54). Having to do too many tests or assessments may demotivate adult learners. It is in this case that the block system of nurse education is better because evaluation is only undertaken at the end of a study block or some clinical placement after many topics have been taught. It would not be possible to introduce the modular system of education in Zimbabwe because classes are too large, there are too many groups who have to be
taught at any one time, and because of the non-supernumerary status of student nurses. A modular system would require far more nurse teachers than are available in Zimbabwe. In addition, some student nurses may find that they have completed the theory of a module without having had a chance to be allocated to the relevant clinical area.

Rivis (1996) in Ghazi, and Henshaw (1998:43) suggest that the fragmentary nature of modularisation makes students feel isolated because it is accompanied by a lack of peer support.

2.5 OTHER SYSTEMS THAT ARE NOT COMMONLY USED

There are other systems, which are not commonly used in nurse education. These are the study day, the daily lecture release, and the daily concurrent theory and practice systems. Literature about these systems of nurse education is scarce.

2.6 THE STUDY DAY SYSTEM

This system allows student nurses to have about two days per week when they are not in the clinical areas. On such days, the student nurses have lectures, library time and study trips. These two days when student nurses are in the school of nursing are situated between days in the clinical areas.

One advantage of the study day system is that an integration of theory and practice usually takes place immediately (Searle 1982:55). The relevance of theory to practice is also easy to see which generates a higher degree of motivation among student nurses and is consistent with the adult learning theory principles. Student nurses have time to do projects and repeat any theory content, which may have been poorly understood. The system also
benefits student nurses by giving them a break, from the stresses of ward routines for a day or two in a week (Mellish & Brink 1990:105).

The system is well suited to situations where classes are small and the school of nursing is close to the clinical areas. Off-duty periods for ward staff are more complicated to work out because of the study days of student nurses working at different levels. For all these reasons, this system is difficult to organize and implement (Mellish & Brink 1990:108).

The study day system would not be easily implemented in Zimbabwe because classes are large. A potential difficulty, which may occur, is that student nurses might not be able to complete their study of the required theory before they are attached to a clinical area.

2.7 THE DAILY LECTURE RELEASE SYSTEM.

With the daily lecture release system, student nurses are released for lectures during duty time. Integration of theory and practice is optimal and easier (Mellish & Brink 1990:106). In spite of the above advantage, the system is difficult to organize and is disruptive of work in the clinical areas — a factor, which may disrupt patient care (Mellish & Brink 1990:106). The student nurses may also become anxious about the very real possibility of missing lectures — especially if they are stationed in busy wards. Ward sisters are also likely to become frustrated and annoyed by the disruption of their ward routine unless student nurses are supernumerary. In addition, lectures may have to be repeated and there is no time for individual study or visits to the library. Nurse teachers are also rushed to plan for their next lectures because they often have to repeat lectures.
2.8  THE DAILY CONCURRENT THEORY AND PRACTICE SYSTEM

The daily concurrent theory and practice system releases student nurses from clinical practice in the morning or afternoon so that they can attend lessons (Mellish & Brink 1990:106; Searle 1982:56). Because theory and practice are well integrated, it is easy for nurse teachers and clinical staff to plan their schedules (Mellish & Brink 1990:107). Nurse teachers are also able to use various teaching strategies and plan their study periods, projects and assignments. Student illnesses will also not disrupt the programme. The system would be unsuitable in Zimbabwe because of large groups as well as too many groups at various stages of training. The system is used in most universities – a fact which seems to suggest that it may be suitable if student nurses are supernumerary (Mellish & Brink 1990:106).

The system, however, needs to be carefully planned and organised if student nurses are to avoid arriving late or missing lessons. This is a factor, which causes stress among learners as well as nurse teachers (Mellish & Brink 1990:107). In addition, lessons may be disrupted if students are not released because they are involved with crises. Experience at peak periods may also be missed if lessons are planned for most mornings. The system is extremely demanding because students are never free from the stress of working in wards (Searle 1982:56).

2.9  THE THEORY-PRACTICE GAP IN NURSE EDUCATION

The aim of any system, which is used for nurse education, is to equip the student nurse with the necessary skills and attitudes to enable her/him to look after patients/clients competently and with empathy. If this goal is to be achieved, the nurse education system has to be able to set aside enough time for student nurses to acquire knowledge and skills and to develop
appropriate professional attitudes. Jacka and Lewin (1986:53) confirm that it is essential for student nurses to acquire the theoretical knowledge before they practise skills and develop attitudes. If this does not happen, student nurses may harm patients/clients if ward sisters ask them to perform procedures about which they have no theoretical knowledge or relevant information. By the time students are placed in clinical settings, there should be no discrepancies between their expertise in theory and practice. At that stage, students should be able to relate theory to practice in an integrated whole.

Although classroom teaching and textbook descriptions of topics and procedures are an important starting point in nurse education, integration of acquired knowledge and competent practice completes the main objective of nurse education, an assertion that is echoed by Jacka and Lewin (1986:53). Many researchers have however expressed doubt about whether what is taught in the classroom or reproduced by student nurses in examinations is able to be adequately practised in the wards (Powell 1982; Melia 1983; Bendall 1973:127; Gott 1982:52-72). This suggests that discrepancies may indeed exist between what student nurses learn in the classroom and what they are actually able to perform under clinical conditions. In practice, one often detects a noticeable theory-practice gap. Mellish and Brink (1990:104) and Davies (1983:580) believe that if the block system were properly implemented, it would close the gap between theory and practice – a gap that may cause harm to patients or prevent them from receiving the best or most appropriate form of treatment.
2.9.1 Causes of the theory-practice gap

Classroom teaching, textbook descriptions and student examinations present well-defined and unproblematic diagnoses of patients. As any experienced nursing practitioners know, the social and psychological dimensions of the patient’s situation may require nurses to manage patients suffering from the same disease in rather different ways. McCaugherty (1991) noted that theory teaching, textbooks and nursing curricula have definable characteristics that make them imperfect reflections of nursing practice because they can never present the richness and complexity of the patient’s social and psychological environment as it is experienced in practice. Under such circumstances, discrepancies between theory and practice become inevitable.

Teachers must update their knowledge and be familiar with current practices in the wards so that their teaching can be up-to-date. Teachers must be cognisant with the effects of the economic environment in which they live in order to be able to not only teach about “ideal” nursing practices but also what is being practised in clinical situations. Student nurses would then not be either frustrated or surprised when they actually begin to practise in clinical situations. A shortage of resources is a common feature in many developing countries, such as in Zimbabwe.

When student nurses have completed a study block, they are ideally supposed to be placed in those clinical areas whose theory content they covered during the study block. This usually does not happen most of the time because student nurses are regarded as being part of the work force and are allocated according to the needs of the hospital service and not their own educational needs. Some student nurses even end up being allocated to
irrelevant clinical areas, which is a very common feature of nurse education in the Zimbabwean situation.

One of the biggest causes of the theory-practice gap is poor communication between the nursing schools and clinical areas. Alexander (1983:206) discovered that seventy five percent of ward sisters were not aware of the theoretical content that had been covered by students in preparation for their clinical placements. She also found that thirty three percent of ward staff actually complained of poor communication between themselves and the nurse teachers. The ward sisters, who should be the ones who close or prevent the theory-practice gap, cannot do so effectively if they are unaware of what theory students have mastered before they are placed in their wards. One of the goals of the present study is to find out how ward sisters and student nurses would like to see the block system improved so that teaching and learning in the wards can be made more effective.

2.9.2 Ways of closing the theory-practice gap

While the causes of the theory-practice gap should be eliminated at all possible points, a number of other methods may be used to close the theory-practice gap. A description of these methods now follows.

- Integrating theory and practice

The integration of theory and practice occurs when the theory covered or read in textbooks is applied to the care of patients. This is also known as transfer of learning. Ellis (1965) found that the transfer is most efficient when the similarity between the theory covered and what happens in clinical situations is maximised. It is therefore essential for nurse teachers
to be conversant with the most recent current practices in the clinical areas so that when they give examples or describe procedures in study blocks, they can be sure that their students will encounter exactly those practices on the wards. The integration of theory with practice can either be helped or hindered by the teaching and learning strategies, which are being used (W.H.O 1991:43). Lumby (1989) demonstrated that a poor integration of theory and practice results in poor learning and recall by student nurses. An exact correlation should therefore exist between what has been taught during study blocks and what is practised in clinical placement areas.

- **Problem-based learning**

Problem-based learning is student-centred and aids the integration of theory with practice by requiring students to deal with real-life situations (Frost 1996:105; McCaugherty 1990; McMillan & Dwyer 1989:93-99). The learner is presented with a clinical situation in which learning needs, objectives and new knowledge have to be identified and sought. The clinical situation stimulates and encourages the student to recall and reflect on prior experiences for answers. This enables the student to recognise the gaps that exist in his/her knowledge and this realisation motivates him/her to read more or conduct the necessary research. A good teacher or ward sister can encourage and facilitate learning by asking questions which will help students to search for the correct answers. This form of contextual learning is remembered for a long time, can be readily applied and motivates students because of its relevance to practice (Engel 1992). Problem-based learning is mainly suited to small groups of students and may therefore not be suitable for conditions in Zimbabwean nurse education.
• **Student-centred teaching method**

The student-centred teaching method uses the Kolb (1984:40) learning cycle, in which students are encouraged to reflect upon their experience and test it in new clinical situations. Hurst (1985) found that this method is popular in nursing education as a method of integrating theory with practice. A good facilitator is necessary to guide, encourage and motivate student nurses with relevant questions so that they may eventually arrive at the correct answers. Nurse teachers, clinical instructors and ward sisters should facilitate student learning during clinical placements.

• **Conducive learning environment**

Layton (1969) and Wong (1978) observed that student nurses learn more during theory and clinical placements if the teachers are friendly and showing a willingness to answer students' questions and provide whatever explanations students need. Under such conditions, incorrect answers or comments made by students either in the classroom or in the ward are used as teaching and learning opportunities — and not as opportunities for ridiculing the student. A friendly learning environment enhances the development of self-confidence in students and encourages them to pursue the integration of theory and practice in a friendly environment. Self-confidence is the trust and belief the person feels in his/her ability to function as a nurse — and self-confidence therefore contributes in a decisive way to the student's professional development and clinical competence (Flagler, Loper-Powers & Spitzer 1988). It is therefore essential for teachers to promote successful experiences among students because this will enhance their self-confidence. Once a student has received theoretical knowledge, she/he should be given the opportunity to
Bakanauskas 1983). When students are praised for performing successfully, they become motivated to close their own theory-practice gaps by applying themselves more energetically in those areas where they still experience deficits. The block system affords student nurses adequate time to apply, in clinical settings, what they have learnt in the classroom – and nurse teachers and clinical supervisors should take advantage of this factor.

- **Role modelling**
Role models must be highly professional, caring, and respectful to others, approachable, skilled and have a high degree of moral integrity if they hope to have a positive influence on their students (Howie 1988; Weeks 1989). Role models become effective if they are aware of what theory and subject content students have covered before their placements. They are also more effective in teaching the integration of theory and practice if they apply and explain the theory behind actual patient care during procedures. Knowledge acquired in such an auditory and visual manner is remembered for a long time and is easily recalled because it is associated with a pleasant person (the role model).

- **Curriculum development and implementation**
The focus of the course content should be on the needs of the patients and on the needs that students have for meaningful learning experiences. Nurse teachers and clinical staff should play a role in planning because they will be responsible for successfully implementing the curriculum. The curriculum should be continuously monitored and evaluated so that it can be kept abreast of current teaching and practices in the wards (McCaugherty 1991). Constant monitoring and evaluation will ascertain
Constant monitoring and evaluation will ascertain the relevance of theory to practice and its integration. The so-called "hidden curriculum", which is likely to have an influence on student nurses when they go to the wards, must also be taught (Cook 1991). This will reduce levels of student anxiety when they arrive in clinical areas where, for example, the "undeclared" emphasis may be to look busy because that kind of behaviour harmonises with the dominant ethos of the institution – to the detriment of patient care.

2.10 SUMMARY

The various systems that are used in nurse education and the gap between theory (taught in the classroom) and practice in the clinical areas were discussed. The modular and block systems are most commonly used while the study day; the daily lecture release and the daily concurrent theory and practice systems are rarely used in nurse education. The block system is good provided that there is adequate staffing (both in the classroom and clinical areas), good communication between the school of nursing and clinical area staff, compulsory assignments during clinical placements and clinical allocation which is based on theory content covered during study blocks. The block system has the advantages of freeing student nurses from the ward stresses and enabling continuity of teaching and learning during study blocks. However, as long as student nurses are not supernumerary, their teaching and learning needs continue to be secondary to the needs of the hospital. Some student nurses may then be allocated to clinical areas whose theory they have not covered resulting in stress and anxiety in some student nurses.
to understand them in isolation from each other unless they are very carefully and intentionally linked and related.

The theory-practice gap is a deficiency in nurse education. However, this can be remedied by teaching current ward practices, encouraging problem-based learning, integration of theory with practice, the creation of student-friendly learning environments and the continuous monitoring and evaluation of nursing curricula.

The centrality of the teaching and learning environment in nursing education will be discussed in the following chapter.
CHAPTER 3

LITERATURE REVIEW

THE CENTRALITY OF THE LEARNING AND TEACHING ENVIRONMENT IN NURSING EDUCATION

3.1 INTRODUCTION

This section of the literature review, discusses the centrality of the teaching and learning environment in nursing education, which is also applicable to general nurse training using the block system.

Nurse education is a process that transforms a student nurse into a qualified professional nurse (Redmond and Sorrell 1996:21). Because it consists of the two interdependent processes of teaching and learning (Linn and Gronlund 1995:9), it may be assumed that the one process (teaching) is a means to achieve the other (learning). Learning involves the acquisition of knowledge, skills, and attitudes which enable the student nurse, not only to become a qualified professional nurse, but one who is competent, confident and caring. In the block system of nurse education, these three domains are taught in two different environments – the classroom and clinical areas.

3.2 LEARNING

Many authors have defined learning as a relatively permanent change in the knowledge, skills and attitudes possessed by the learner. The skills and abilities that one learns are different from the skills and abilities that one acquires through one’s natural genetic inheritance or through the various
processes of physical, mental and psychological maturation (Mellish & Brink 1990:70; Heimlich & Norland 1994:27; Mellish & Wannenburg 1992:51). Learning is the product of interaction between a learner and his/her environment. The observable skills and changes in behaviour may be caused by the acquisition of new knowledge and skills or by the modification of present behavioural patterns (Mellish & Wannenburg 1992:51).

While knowledge is the simplest form of learning (knowledge is first stored in the short-term memory area of the brain), this short-term retention process is positively or negatively affected by the learner’s state of health, attention, motivation and environment. Continuous repetition of the knowledge causes the repeated information to be transferred to the long-term area of the brain for future recall if the knowledge or skills concerned are perceived to be useful by the learner. This information enables the understanding of how theory and practice are integrated, as well as how student nurses are motivated in the block system of nurse education. Student nurses (like any other adult learners) will become highly motivated to learn if they believe that the new knowledge they are acquiring will help them to achieve their goal of being qualified, competent, confident and caring professional nurses (Knowles 1980:40-59, Davies 1971:21).

Knowles and Davies also found that adult learners (which include student nurses) become highly motivated to learn and retain more if they are given responsibility for their own learning. Unfortunately this may not happen in the study blocks because student nurses may be compelled to attend long lectures whether they want to or not and (even more unfortunately) their
teachers may not fully explain to them how the new knowledge they are being offered is both vital and necessary for the achievement of their goals. In terms of what is known about andragogical learning theory, the failure on the part of teaching staff to explain the significance of new knowledge means that many student nurses will fail to acquire the motivation they need to pursue their studies and practice with enthusiasm. This research will give us a precise idea about how student nurses perceive the block system and how they cope with learning under the circumstances outlined above.

Student nurses (like all adult learners) learn more efficiently and easily in a friendly and encouraging environment, which is neither intellectually nor physically threatening nor humiliating. Role models are important in learning skills. Research has shown that role models, who are perceived by student nurses to be similar to them, have a high status and whose behaviour is rewarded materially or in other ways, are imitated more by student nurses (Bendall 1975:26). For student nurses, sisters in charge, clinical instructors and matrons are role models in the clinical areas. Nurse teachers need to participate in a way that encourages and motivates student nurses if they hope to become successful role models for their students. Student nurses (like any other learners) have a deep need for their performance and efforts to be recognized and praised. Encouragement helps student nurses to maintain high levels of motivation and morale. If however student nurses are constantly belittled and ridiculed by their teachers, as is sometimes the case, their motivation (except in the most determined of students) will rapidly decrease (Rogers 1986). It is vitally important for teaching staff to realise that they can make or break the hopes
and aspirations of their students. Those who choose (through ignorance or ineptitude) to destroy the morale of their students will bear a heavy burden of responsibility.

3.3 TEACHING
Teaching should take place in a well-organized and properly controlled learning environment that is suited in every possible way to the learning needs of adult learners. It is only in such an environment that adult learners (the student nurses) will be able to acquire new knowledge, skills and attitudes. Teaching may only serve to modify previously acquired domains of skill and knowledge (Newcomb, McCracken & Warmbrod 1986:21; Heimlich & Norland 1994:24). This suggests that previously acquired knowledge and skills constitute an important basis for the acquisition of new learning.

Teaching involves both the transmission of knowledge and skills to others as well as ways of developing and influencing their thoughts and actions (Mellish & Wannenburg 1992:47). Quinn (1995:113), however, uses the word facilitation instead of teaching because adult learners prefer their learning to be facilitated. In adult education, a teacher should be a facilitator and a resource from whom knowledge and skills may be obtained – and not merely a transmitter of information. Reilly and Oermann (1992:5) agree with this assertion because they consider teaching to be an interactive process which facilitates rather than controls learning.

Since student nurses need to be self-directed learners, teaching or facilitation is required to guide them and for the purpose of making sure
that the curriculum requirements and the regulations of the registering body are fulfilled. Teachers or facilitators must realise that adult students become highly motivated and ready to learn when they can see and understand the relevance of what they are being taught. Adult learners can nearly always learn for themselves in order to be able to solve immediate social or professional tasks. Because of this, the teaching of adult learners (such as student nurses) should be problem-centred. The facilitator must encourage problem-centred learning by providing real-life examples and problems for solution during the course of instruction.

The block system often allocates student nurses to clinical areas before relevant theory has been covered in the classroom. As a result of this, one of the most important motivating factors (relevance and opportunities to apply new knowledge) is defeated during clinical placements. However in practice the block system may result in some study blocks and some clinical teaching sessions being teacher-centred. Teaching and learning in some busy clinical areas may be so unsystematic and unpredictable that it destroys the motivation of student nurses.

In this study, the supervisors (teachers) of both classroom and clinical areas will be asked about the teaching techniques they use in order to maximize student nurse learning in the block system of nurse education. Student nurses will also be asked how they cope with the departures from adult learning principles, which have been described above.
3.4 THE CLINICAL TEACHING PROCESS

In the block system, the bulk of clinical teaching is carried out during the placement of student nurses in the various clinical areas. Clinical teaching refers to the teaching of student nurses in those areas where clients or patients are available to be treated (in wards and clinics, for example). The purpose of clinical teaching is to assist student nurses to apply their knowledge and newly gained expertise in the care of patients and clients (White & Ewan 1991:2). Opportunities to relate the theoretical knowledge covered in the classroom with nursing practice will therefore maximise learning in student nurses. Clinical teaching may be conducted in either individual or group settings. Numerous opportunities arise for clinical teaching when student nurses are placed in clinical settings. Because the nurse teacher has an opportunity to demonstrate nursing skills to students in such settings, she can give them opportunities to relate the theory they have learnt to clinical practice.

In the ideal implementation of the block system of nurse education, student nurses realize the importance, usefulness and relevance of the theory that they will have recently covered in the classroom. As far as student nurses are concerned, the clinical area is the “real world” because it presents them with a variety of experiential learning opportunities on real patients – unlike the classroom where they learn about “ideal” or hypothetical patients.

Clinical teaching also assists student nurses to acquire the personal, technical and practical skills of the art of nursing and communication. Such personal skills, especially when they are required to deal with deeply
distressed patients and relatives, can only be taught in the clinical areas and not the classroom (Forthergill-Bourbonnais & Higuchi 1995). There is no textbook description or classroom situation that can fully capture the variations in the emotional and physical responses of patients with the same illness. Such experiences can only be gained at the patient’s bedside in the clinical area.

During clinical placements, student nurses develop responsible, caring attitudes and values towards their patients. These are all essential tools in the noble profession of nursing (Iwasiw & Goldenberg 1993:659). It is for this reason that student nurses become motivated to acquire the necessary skills they need during clinical placements. Alexander (1984:4) found that student nurses’ motivation to learn was high during clinical placements and the student nurses themselves ranked ward-based tutorials as more beneficial than classroom-based knowledge acquisition. This suggests that the best time and place for student nurses to acquire what they need to know is during their placements in the various clinical areas because it is during such times that their motivation is highest.

Similar findings were reported by Tlakula and Uys (1993:30), who found that student nurses benefited more from learning in clinical areas during their first year of training. The implication of these findings for nurse education is that nurse teachers and other professional nurses should intensify student nurse teaching and learning during this period of their maximum motivation. Greenwood and Winfreda (1994:185) took advantage of this period of high motivation in student nurses by assigning eight student nurses as supernumerary students to a nurse teacher in a ward.
Ward sisters also supervised these student nurses. It was found that these students performed better than those who were not similarly supervised and supernumerary. Such a system, however, might not be possible in the general nurse block system in Zimbabwe because of the large intakes, the shortage of nurse teachers and the fact that student nurses are part of the hospital workforce.

Despite the advantages of clinical teaching described above, Uys (1992:23) noted that clinical teaching is rarely done in a systematic and planned manner and is perceived by student nurses to be assessment-orientated – a perception, which seems to suggest that it is not effective. In fact, the perception that clinical teaching is perceived to be assessment-orientated causes extreme anxiety in some student nurses (a factor that does not facilitate their successful performance). In addition, since student nurses are part of the hospital workforce in Zimbabwe, they are expected to provide total patient care. Such student nurses may well find themselves having to perform procedures for which they have not received any tuition in the lecture room. This can understandably generate enormous stress and anxiety – emotions, which could hardly fail to make any student nurse, feel ignorant, frustrated and helpless. The block system of nurse education is partly implemented in Zimbabwe in this way. The clinical teaching of student nurses under such circumstances can easily become inadequate, and ineffective and undermine the close connection between theory and practice that should prevail in the block system of teaching.

Iwasiw & Goldenberg (1993:659) point out that there are times when student nurse peers do clinical teaching. This suggests that peer teaching
might play an important supplementary role in nurse education. Skilled student nurses can sometimes function as invaluable supplementary teachers, and those who have a necessary ability should be given the chance of teaching their peers under the guidance of the professional teaching staff (Mellish & Wannenburg 1992:72-73). This observation was also made by Bradshaw (1995:215), who believes that clinical teachers should deliberately make peer teaching (which occurs in clinical groups) an integral part of the teaching system. Peer teaching can be most effective in those cases where there is shortage of staff on wards, unfriendly ward sisters or placements in areas before the necessary theory has been covered in the lecture room. Peer teaching demonstrates the advantages of being individualised, empathetic and relaxed because feedback can be both immediate and friendly (Bradshaw 1995:214). The disadvantage of peer teaching is that peers can teach each other incorrectly. Despite this problem (which may be obviated by the proper guidance of the professional teaching staff), peer teaching can provide student nurses with opportunities to learn about instruction, helping and working with others. It can also help them to understand the importance of being good role models and collaborators (Goldenberg & Iwasiw 1992:28). All the factors prepare student nurses for the educational role, which they too will have to assume as professional nurses.

3.5 THE TEACHING AND LEARNING ENVIRONMENT IN THE CLASSROOM
Student nurses are adult learners who, according to the researcher's accepted andragogical principles, are supposed to be actively involved in their own learning. In the block system of nurse education, student nurses
are taught theory in the classroom. Practical procedures are also first taught during study blocks in a simulated clinical setting – which may be a classroom or a demonstration room.

In Zimbabwe, where classes may contain as many as 65 or more student nurses, didactic teaching methods are used for the most part because of the huge amount of new subject content that has to be covered during study blocks. If it were not for the constraints imposed by large classes, nurse educators would have more frequent opportunities to use those experiential and problem-based methods which are known to arouse critical thinking skills and levels of motivation in student nurses (Stienborg, Zaldivar & Santiago 1996:601). Large groups of student nurses are so impersonal that they cause high levels of frustration and stress in both teachers and student nurses alike (Boman 1986:226).

Similar observations were made by James and Jones (1992, quoted in Ghazi and Henshaw 1998:43), who noted that the return to more formal teaching methods such as the formal lectures because of the large student intakes of the Project 2000 programmes in the United Kingdom, has resulted in there being fewer opportunities for nurse teachers to accommodate students’ individual experiences and needs. It has been well established that the involvement and participation of learners is necessary if learning is to take place. Harvey and Vaughan (1990:181-185) found that student nurses disliked lectures and preferred student-centred teaching methods because – as Quinn (1995:115) noted – lecture methods are teacher-centered and they require student nurses to be the passive recipients of information. This
tends to frustrate and demotivate student nurses who perceive themselves as adult learners.

Harvey and Vaughan (1990:185) also found that student nurses favoured student-centred teaching and learning methods and also methods that involved group interaction. This suggests that student-centred teaching and learning methods are effective and that they should be used to improve the education of student nurses. Lectures do not encourage critical and analytical thinking by student nurses (Sweeney 1986:257): they encourage student nurses to cram and reproduce lecture notes in examinations. This becomes most evident in end-of-study block examinations when one finds that student nurses have reproduced their teachers’ notes verbatim. According to Silberman (1996, in Moffett & Hill 1997:44), most teachers speak at a rate of 100 to 200 words per minute while students hear at a rate of 50 to 100 words per minute. This means that students only hear half of what is being said – a sure indication that traditional lecture methods are an extremely inefficient teaching method, which promote a lower level of learning factual information (Moffett & Hill 1997:44).

Research has shown that the incorporation of active learning into teaching encourages self-direction, collaboration and critical thinking (Garrett, Schoener & Hood 1996:37-39; Wissmann 1996:42-46). Rideout (1994:147) also recommends a move from traditional teacher-centred methods to more student-centred approaches of nursing education so that student nurses can learn the skills of reflection, criticism, independence, creativity and inquiry (all of which are skills that modern nurses need). Active learning reinforces instruction because it requires students to think and apply their new knowledge. Students should therefore play an active role in their own
learning by reading, reflecting and interacting with teachers and other students.

The main objective of classroom teaching is to assist students to achieve a set of intended learning goals (Linn & Gronlund 1995:8), which have been predetermined by the Health Professions Council in Zimbabwe. Although it is important for student nurses to familiarise themselves with content and pass their examinations, it is also very important for them to be able to provide skilled nursing care to patients. Most of the learning goals should therefore reflect those skills and attitudes that nurses need in order to practise their profession properly.

Ideally, as has already been noted above, the teaching of theory should be immediately followed by the allocation of student nurses to relevant clinical areas so that they can integrate the theory they have learnt with practice. This ideal clinical allocation of student nurses occurs by chance – only for a few students after the completion of study blocks. Allocation to clinical areas when student nurses have not been taught the necessary theory content makes many student nurses feel fearful and anxious because they may be expected to perform procedures, under minimal supervision, for which they are ignorant. One also cannot help but wonder what sometimes happens to patients in such circumstances.

3.5.1 The physical classroom environment and the social classroom environment

The physical and social environment generates the atmosphere in the classroom. Classroom accommodation should be adequate and comfortable.
It should be adequately ventilated and heated so that the teaching and learning process can take place in comfortable surroundings (Borich 1988:232). The classroom should also contain the necessary teaching aids. However, because of budgetary constraints and the constant demand for more nurses in Zimbabwe, what one actually finds is that there is overcrowding in classrooms and a shortage of teaching equipment. This makes teaching and learning so difficult that both nurse teachers and student nurses begin to suffer from varying degrees of discouragement. Student nurses are always prepared to learn if they are physically and emotionally comfortable in their learning environment.

The classroom’s social environment consists of the teacher and the student nurses. The climate or atmosphere in the classroom is a factor of major importance. The classroom should be an environment in which psychological safety exists and in which learners feel at ease (Quinn 1988:45). The social environment should be conducive to learning and not tense or charged with negativity. Student learning can be enhanced and facilitated by a teacher who is supportive, who shows that he or she is interested in students’ learning needs, and who has a genuinely empathetic understanding of student nurses’ social and learning difficulties (Rogers 1961; Brown 1981; Flagler, Loper-Powers & Spitzer 1988). Students should therefore be allowed to communicate with each other and with the teacher during lessons. Free interaction between the students and the teacher is essential if effective teaching and learning is to take place in the classroom (Borich 1988:232). If the classroom atmosphere is tense and critical, learning will be inhibited. The classroom climate can be varied according to the objectives of the lesson. It may be helpful, for example, for
a teacher to limit interaction in the classroom when a lot of new theory needs to be covered. However, when work is being reviewed, classroom interaction is essential.

Although little research has been conducted into what constitutes the ideal classroom learning climate in nurse education (Fisher and Parkinson 1998:238, Orton 1981:65), the few studies which have been done suggest that there is a need for nurse educators to create better classroom climates that are conducive to learning.

- Nurse educators were found to have an unnecessary authoritarian attitude towards student nurses by Clinton (1992:4-6). Other research showed that nurse educators also deliberately maintain formality and social distance as a means of social control over their students (Stephenson 1984:283-290).
- Similar findings were found in a meta-analysis of major studies on nurse educators, which revealed that the teacher believed herself/himself to be the source of all knowledge while students are merely passive recipients of what was given to them (French 1992:619). These findings suggest that nurse educators do not regard student nurses as experienced and self-directed adult learners.

Student nurses however want to be treated as adult learners and resent their authoritarian teachers. Authoritarian attitudes drain students of their motivation. In mitigation one may say that nurse teachers sometimes assume authoritarian attitudes so that they can cover a lot of theory quickly (i.e. without questions or interruptions from students) before they go and do
their other work such as planning their next lessons and marking student assignments and examinations. However, encouraging and friendly relationships with students are important in promoting student learning. All nurse teachers should be professional enough to evince a teaching style that is friendly and caring – no matter how busy they are. Students do understand when it is necessary for a nurse teacher to cover a large amount of material in any given period. All that the nurse teacher needs to do is to explain to the students in a friendly and respectful way what is taking place. Students are only too happy to accept such explanations. But they do not understand or appreciate arrogance or authoritarianism on the part of their teachers. In order to establish good interpersonal relationships with students, the teacher should be warm, open, highly student-centred and predictable (Lowman 1985, in Reilly and Oermann 1992:144).

3.5.2 Nurse teacher characteristics and behaviours which promote learning in the classroom

There are certain characteristic forms of behaviour of nurse teachers, which have been found to promote learning of students in the classroom.

- An effective nurse teacher shows an interest in student nurses’ learning needs and demonstrates sincerity and a willingness to understand the social and learning difficulties of student nurses (Rogers 1961; Brown 1981; Flagler et al 1988).

- An effective teacher ensures that the classroom space is adequate for the number of students whom she/he will teach. The classroom needs comfortable chairs and desks, and needs to be well ventilated, heated and lighted (Borich 1988:232). This kind of physical environment promotes learning in student nurses.
• A good nurse teacher creates and establishes a good relationship with student nurses as adult learners early in the study block so that they learn to trust him/her. This is vitally important – especially when student nurses have to become involved in learning experiences that may involve some risk, such as learning to give injections (Reilly & Oermann 1990:29; Reilly & Oermann 1992:144). The nurse teacher ought to be a model of genuine dedication to her/his profession and demonstrate patience towards learners (Mellish & Wannenburg 1992:49).

• A good nurse teacher demonstrates caring attitudes towards students – attitudes such as respect and confidence (Bergmann 1990:33-44). Halldorsdottir (1990:95-107) found that students perceive caring to include a positive personality, professional commitment, mutual trust, a working relationship, the promotion of feelings of self-worth, self-acceptance and personal and professional growth. A caring teacher-student relationship is vital because a trusting and supportive relationship enables students to think critically and empowers them to implement nursing care. Such a relationship helps students to understand what a nurturing and caring learning environment really is. If students are nurtured and cared for by their teachers, they in turn will find it easier to care for their patients in a genuine and caring way (Paterson & Crawford 1994:164-173).

• An effective nurse teacher will also use experiential and problem-based teaching methods as often as is practicable. As the researcher mentioned above, such methods encourage the active participation of student nurses in their own learning and they are soundly based on the principles of teaching adults (andragogy). Many studies have suggested
that active learning, which promotes student involvement, is more efficient than the kind of passive learning in which students are expected to be the uncritical recipients of information in lectures (Brookfield 1990 & Driscoll 1994, in Moffett and Hill 1997:44).

- The nurse teacher prepares and presents the teaching materials by using available teaching aids. She/he teaches in a clear and moderately paced manner and allows as much student nurse participation as possible (Borich 1988:8). The teacher should always vary the presentation of teaching materials by using visual aids, questions and various reinforcement techniques to keep student nurses motivated and interested in the material being presented (Borich 1988:8).

- A good nurse teacher is a nurse with higher academic qualifications and a wide and thorough knowledge of her/his subject matter (Thompson & Sheckley 1997:164, Andersson 1999:33).

3.5.3 The roles and responsibilities of the nurse teacher

The nurse teacher’s roles and responsibilities in nurse education are central, critical and fundamental. Her/his roles are academic, administrative and psychosocial. The academic role is both theoretical and clinical. All these roles work together to promote the best possible education for student nurses.

- The nurse teacher is trained to impart both theoretical and clinical knowledge and skills to student nurses during study blocks and clinical area placements (Crawshaw 1978, in Lee 1996:1127-1134, McHale 1991:30-32).

- The nurse teacher plans the lessons (Gallego, Goodey, Lovett, Docking, Hield & Beattle 1990) in such a way that, with or without the use of
teaching aids, student nurses acquire whatever they need to know during study block lessons so that they can apply it to real patients in clinical areas.

- The nurse teacher helps student nurses to link theory and practice by giving clinical examples during classroom teaching of the most common conditions which student nurses will encounter in their clinical placements (Osborne 1991:28; Gross, Aysee & Tracey 1993:158, Gerrish 1990).

- The nurse teacher has a responsibility to teach practical procedures in the classroom or demonstration room so that student nurses can practise these during clinical placements. The nurse teacher must therefore be familiar with current clinical practice so that she/he will not be teaching material that is out of date.

- The nurse teacher must not only teach student nurses during clinical placements. She/he must also support and encourage clinical staff in their teaching role (Osborne: 1991:28-29).

- The nurse teacher assists student nurses to apply specialist subjects such as sociology and psychology (which may be taught by non-nursing specialists) to nursing practice.

- The nurse teacher takes part in the monitoring of student progress (Crotty 1993:150-157), the assessment and evaluation of student nurses, as well as evaluation of the clinical placements (Jinks 1991:128,132).

- The nurse teachers must collectively develop and implement whatever new curricula are necessary to ensure a successful integration of theory and practice. It is important for nurse teachers to involve clinical supervisors in curriculum development so that they can also implement the curriculum during student nurse clinical placements.
• The nurse teacher must ensure that the learning of student nurses is enhanced during clinical placements by liaising with clinical staff (Clifford 1992:340-349), by encouraging a pleasant learning environment that is conducive to optimal learning (Fretwell 1983:37-39; 42-44; Ogier 1986:82, 85, 54-57, Osborne 1991:28-29) in the clinical areas, and by fostering good communication between the school of nursing and clinical areas. It is incumbent upon nurse teachers to discuss what student nurses know with clinical staff and what they are expected to learn during particular clinical placements.

• The nurse teacher organises continuing education seminars and courses for clinical supervisors in order to update their knowledge. In Zimbabwe, a two-week clinical assessor's course or art of teaching and assessing course is organised on a regular basis for new clinical supervisors.

• The nurse teacher is involved in student nurse counselling and support during times of social or academic stress or crisis (Jinks 1991:131).

• The nurse teacher performs educational management activities and administrative activities (Crotty 1993:152-157).

Whereas what has been described above constitutes the ideal role of nurse teachers in nurse education, many researchers have found that such conditions do not prevail in many nurse education contexts. They found, for example, that very little student nurse supervision was being done by nurse teachers during clinical placements (Fretwell 1982; Alexander 1983:149-208; Clinton 1985) and that most of the teaching of student nurses was being done by ward sisters (Bendall, 1975; Alexander 1983:143-208). This suggests that nurse teachers are not involved to any great extent in the clinical education of student nurses.
This lack of involvement may be attributable to lack of time because nurse educators are often overwhelmed with classroom and administrative responsibilities (Fergusson & Jinks 1994). Research has also shown that they demonstrate a lack of control in the clinical environment and anxiety about the less predictable and routine types of teaching in the clinical areas (Jones 1985). This suggests that clinical teaching is to a large extent delegated to ward staff that are not trained in teaching and are extremely busy with their major responsibility —, which is patient care.

Schuldham (1988:6) and Reid (1985) believe that the non-involvement of nurse teachers in clinical teaching is attributable to their deficits in knowledge of current ward practices and the fact that some of them consider clinical teaching to be secondary to classroom teaching. The latter reason for non-involvement is unacceptable when one considers the amount of time that is dedicated to clinical areas in the block system of nurse education as it is implemented in Zimbabwe. Nurse teachers may also find it difficult to accompany student nurses to clinical areas because the large intakes in some of the nurse training schools in Zimbabwe require them to devote a large amount of their time to marking assignments and examinations. In spite of these problems, nurse teachers should support clinical supervisors by encouraging them to facilitate student learning. They should also talk to them about what they expect of student nurses in the clinical areas.
3.5.4 Constraints on the role of the nurse teacher

The nurse teacher is one of the most important sources of information and knowledge in nursing education. Cheng (1994:221) found that most learning by student nurses occurs in the classroom. Nurse teachers however have to do with the following constraints and problems, which diminish their effectiveness as teachers of student nurses.

• Large classes: Large classes are a common feature in most developing countries such as, Zimbabwe because governments demand many well trained nursing professionals without providing adequate funding for expanding existing human and physical resources. The teaching environment then becomes extremely unconducive to learning and the shortage of nurse teachers ensures that those who are there are hopelessly overworked (Sims 1976:377-389). This understandably creates situations in which student nurses’ performance is poor (Cheng 1994:221). This problem of large classes in nurse education has also been emphasised by Boman (1986:226) and Crotty (1993:10).

• The nurse teacher is required to teach vast amounts of theory within limited study block periods (most of this theory is new information for student nurses). Many teachers then feel compelled to resort to didactic formal lecture methods of teaching in order to complete the syllabus. Student nurses react negatively to the impersonal and authoritarian atmosphere created by this necessity – an atmosphere, which is contrary to the principles of andragogy. Harvey and Vaughan (1990:185) noted that abandoning the lecture method of teaching might require a wide range of resources, which are both expensive and time-consuming.
Bligh (1971) notes that the need for lectures is created by the large amounts of new information that has to be covered before student nurses are allocated to clinical areas. Beck and Srivasta (1991:127-133) found that student nurses experience-varying degrees of stress because of the huge amount of material that they are expected to master, the lack of timely feedback and the need to achieve adequate examination grades.

- Wong (1979:161-168) found that student nurses found it difficult to transfer classroom knowledge to clinical practice because the school and clinical areas are often located in two different geographical locations.

- Kreigh and Perko (1983), cited by Harvey and Vaughan (1990:182), found that the theory-practice gap is a major problem in nurse education. Classroom teaching that is not based on current clinical practices and the allocation of student nurses to clinical areas when they have not been introduced to the relevant theory and subject content in their study blocks causes it.

- Inadequate teaching and learning resources, such as lack of teaching aids and current reference books in the library, adversely affect the teaching and learning of student nurses. This problem may be common in most schools of nurse training in Zimbabwe.

- Some study blocks are of short duration and it is difficult for nurse teachers to implement student centered teaching methods, which may consume too much time (Harvey & Vaughan 1990:185). Redmond and Sorrell (1996:25) also noted the above constraints when they stated that decreasing financial and material resources, increasing class sizes and the shift to community-based settings inhibit the development of caring relationships with student nurses.
• Some student nurses are not suitably prepared for their clinical role (Clifford 1992:340-349).

3.6 CLINICAL TEACHING AND LEARNING

In the block system of nurse education, which is used in the general nurse programme in Zimbabwe, student nurses spend most of their training period in the various clinical areas in order to learn to integrate theory with nursing practice. The clinical environment, ward sister, clinical instructor and nurse teachers all play very important roles in facilitating the clinical education of student nurses. What happens in practice, however, is that nurse teacher involvement in clinical supervision and teaching may be limited.

3.6.1 The clinical learning environment

The clinical environment provides student nurses with real-life experiences of nursing practice. They can apply what they have learnt in the classroom and acquire more knowledge, skills and those attitudes that are appropriate and necessary in a professional nurse (Bradshaw 1995:212). There are many conditions in the clinical learning environment that ultimately influence the student nurse’s learning outcome (Dunn & Hunsford 1997:1299). Some of these conditions are the illnesses of patients, and the presence and concern of the patient’s relatives and friends as well as the involvement of other members of the health team. Under these conditions, student nurses are socialized into their nursing role (Oermann 1996). Unless the ward sister or clinical instructor sympathetically closely supervises and facilitates the learning of the new student nurses, the student nurse’s clinical experiences may cause demotivation, anxiety and stress –
all of which adversely affect clinical learning. A good learning environment is a place where there is a variety of learning opportunities, which are provided by competent and sympathetic staff that facilitate the integration of theory with practice (Jacka & Lewin 1986:53).

3.6.1.1 Stress and anxiety in the clinical environment

In the general nurse block system in Zimbabwe, student nurses may experience problems in clinical placements because they are sometimes allocated to clinical areas either before or long after they have covered the relevant theory in the classroom. Mahat (1998:11-18) studied the perceived stressors of baccalaureate nursing students in a nursing college in the northeastern United States. The results of this research indicate that students frequently perceive stressors in the clinical setting. Other authors have also indicated that student nurses perceive the clinical placements as the most stressful and challenging periods of their nurse training (Pagana 1988:418-424, Beck & Srivasta 1991:127-133; Lindop 1991:110-120).

The stress is worse during the initial clinical experience and whenever a student nurse is placed in a new clinical area (Policinniski & Davidhizar 1985:34; Lewis, Gadd & O’Connor 1987:94). Some of the stressful events are a feeling of incompetence, evaluation, therapeutic communication, interpersonal relationships and the physical care of patients (Zweig 1988, in Mahat 1998:13). This suggests that student nurses need more support during these periods. During the initial clinical placements, the student nurse is expected to give nursing care to patients for the first time and also to interact with the patient and his/her relatives. These requirements cause extreme stress in student nurses (Windsor 1987:150-154; Pagana 1988:413-
Difficulties with handling their responsibilities towards patients were cited as a source of stress by generic bachelor of nursing students (Beck & Srivasta 1991:127-133). It is therefore crucial that nurse teachers and clinical supervisors support student nurses during this time by performing proper clinical teaching and supervision.

Other factors that cause stress in student nurses are a fear of harming and causing pain to patients during procedures such as giving injections, the dressing of wounds and bathing (Wilson 1994:81-86, Kushnir 1986:13), the care of terminally ill patients and unpredictable conditions in clinical areas (Parkes 1985:945-953; Lindop 1991:110-120; Wang 1991:35-36; Selleck 1982:137-140), and possible rejection and hostility on the part of patients and clients (Elfert 1976:327-358). This suggests that student nurses need to be accompanied and assisted when they perform these procedures in the early stages of learning how to perform these procedures so that their fears, anxieties and stress may be minimised. This is very important because extreme stress and anxiety during clinical experience subvert and undermine the learning experiences of student nurses (Eysenk 1970:365; Whitman, Spendlove & Clark 1984, in Mahat 1998:17). These difficulties are compounded by the general nurse block system in Zimbabwe because student nurses may frequently be allocated to clinical areas before the relevant theory has been covered.

The implication of the above discussion is that the learning of a number of student nurses may be undermined by the way in which the block system is
implemented in Zimbabwe because of the large intakes and the non-supernumerary status of student nurses. Student nurses have therefore to be closely supervised during their first clinical placements, when they are allocated to clinical areas for the first time and when they are exposed to clinical areas before they have learnt the relevant theory and subject content. Mahat (1996:163-169) found that student nurses often sought support from friends and family members when stressful events relating to interpersonal relationships or heavy workload overwhelmed them, and that they only approached clinical instructors or ward sisters for assistance and guidance when they found that they were unable to cope with their first exposure to clinical experience or when they found that they were unable to perform expected practical skills adequately.

This suggests that there is a real need to identify student nurses' interpersonal problems and the kind of heavy workload they are expected to bear. It is essential that student nurses be given the necessary support in all aspects of their clinical experience. Such aspects would include initial clinical experiences, allocation to new areas when relevant theory has not been covered, heavy workloads and good interpersonal relationships. Nurse teachers, clinical teachers and ward sisters should make it their duty to find out whether or not student nurses in their first clinical placements are familiar with relevant theory. If they find out that they are not conversant with the necessary theory, they can introduce them to the simple activities of practical nursing first. This simple expediency will allow student nurses to gain the necessary confidence to learn the theory they need and to approach the more complex practical tasks they need to perform without excessive anxiety and apprehension. A well-implemented block system of
nurse education will recognise this need if communication between the school of nursing and the clinical areas is cooperative and mutually supportive. Sympathetic clinical instructors and ward sisters can easily take measures to minimise fear and stress in student nurses. Stressful ward experiences were also found to be a major contributory factor in student nurses who withdraw from training (Fry, Karani & Tuckel 1982:22). What this suggests is that stress and fear alone can cause student nurses to leave training unless they are properly and sympathetically supported.

3.7 EDUCATORS IN CLINICAL TEACHING/INSTRUCTION
Student nurses are supervised/taught during their clinical learning experiences by clinical teachers, ward sisters and professional nurses who work in the various clinical settings. Supervision is an important learning strategy (Marrow & Tatum 1994:1247) in the clinical areas where skills and attitudes are learnt.

3.7.1 Clinical teacher characteristics and behaviours which promote learning in the clinical areas
There are certain well-defined characteristics and behaviours in clinical teachers that promote learning in student nurses during clinical area placements.

Wong (1978:369), O'Shea and Parsons (1979:411-415), Reilly and Oermann (1992:5-6) and Bradshaw (1995:211) found that student nurses learn much more effectively from clinical teachers who are:
• Respectful towards and approachable by student nurses
• Knowledgeable and willing to answer student questions
• Obviously possess the kind of clinical competence and experience that enable the clinical instructor to supervise and assist student nurses to develop good skills and attitudes
• Have good interpersonal relationships with student nurses as individuals and as a group
• Have good instructional skills and the ability to identify the learning needs of student nurses. The clinical instructor must be able to plan, supervise and evaluate student nurse teaching and learning while taking the student nurses' characteristics and learning goals into account.
• Give positive feedback to student nurses and who don't emphasise negative feedback. Negative feedback was found to diminish the self-confidence of student nurses in clinical practice (Flagler et al 1988:347-348).
• Enthusiastic about their work, their tasks and their profession as clinical teachers
• Patient, energetic and flexible clinical teachers (Bradshaw 1995:211)
• Good role models (Sie & Bell 1994:391)
• Explain what they are doing in the clearest possible way, and who correct mistakes of students without belittling students or humiliating them, and who do not criticise students in front of other students (Li 1997:1252). In addition, good clinical teachers establish nurturing and encouraging relationships with their students because they make them feel relaxed by being open-minded, non-judgemental and supportive on all possible occasions.

Whenever clinical teachers manifest the characteristics and behaviours mentioned above in a non-threatening and conducive learning environment,
one might be sure that student learning is enhanced to the highest possible degree. The implications of the above findings emphasize the need for clinical instructors to create a good teaching and learning climate or environment. Since clinical teachers in Zimbabwe are promoted on the basis of experience and not teaching, nurse teachers should instruct clinical teachers in the principles of teaching so that they can be effective in their teaching role. It is also important for them to keep their skills and knowledge up to date by attending continuing education courses.

3.7.2 The roles and responsibilities of the clinical teacher/instructor

The teaching role of the clinical teacher during the placement of student nurses in the clinical areas is fundamental because it assists student nurses to integrate theory and practice. While clinical teachers in Zimbabwe are based in the clinical areas, they are controlled and answerable to the school of nursing administration. Bradshaw (1995:211) notes that the teaching role in clinical teaching is both diverse and demanding. Quinn (1980:206), White and Ewan (1991:7-8) and Bradshaw (1995:211) posit the following roles and responsibilities of the clinical teacher:

- The clinical teacher facilitates, teaches and guides student nurses in the clinical areas.
- The clinical teacher interacts with student nurses during their placement in the clinical areas.
- The clinical teacher facilitates student nurse learning by acting as a role model and mentor (Davies 1993:627).
- The clinical teacher assists students to integrate theory with practice (Crotty 1993:460-464).
The clinical teacher evaluates the clinical performance of student nurses' during clinical assessments.

The clinical teacher is a student nurse counsellor who helps to solve student nurses' educational and social problems.

The clinical teacher supports and encourages student nurses and clinical staff in their work.

The clinical teacher acts as a resource person for student nurses as well as for other clinical staff.

The clinical teacher accepts the responsibility of promoting and maximising patient care.

The clinical teacher contributes by performing nursing duties during exceptionally busy periods.

The clinical teacher plans and coordinates the clinical education of student nurses and also assesses the learning needs of various levels of student nurses (Mellish & Wannenburg 1992:50).

The clinical teacher acts as a liaison person who mediates between the clinical area and the educational organizations (Crotty 1990:460-464).

Many researchers (Flagler et al 1988:342; Sloan & Slevin 1991; Booth 1992:50; Twinn 1992:132; Wyatt 1978:263) found that the clinical instructors' support for student nurses in the clinical areas helped students to develop self-confidence, to improve their learning capacity and not to feel cut off from the school. The implication of the above findings in the block system is that clinical teachers should be more available to student nurses - especially since allocation of student nurses is seldom harmonised with the theory and subject content, which is covered in the classroom. Inexperienced junior nursing staff because clinical teachers are assigned to
many different wards and cannot obviously remain in the same ward all the time sometimes performs the teaching of clinical practice to student nurses.

According to Barnard and Dunn (1994:420) and Windsor (1987:150), clinical teachers must engage student nurses in clinical experiences that are related to course content. Clinical teachers must therefore be fully aware of the theory that each group of student nurses has covered before they arrive in their clinical areas. This will make it easier for the clinical instructor to link theory and practice for the benefits of her/his students. It is therefore the nurse teacher’s role to ensure that clinical teachers are prepared for their clinical education roles. This will make the clinical teacher’s responsibility much easier and so she/he will then be able to assist and motivate students much more effectively in the clinical setting.

3.7.3 Constraints in the clinical teacher’s (clinical instructor’s) role
Clinical teachers are responsible for facilitating student nurse learning in the clinical setting. Since clinical teachers are employed to teach student nurses in the clinical setting, their role as teachers is central to the clinical education of student nurses. Clinical teachers however experience a number of constraints and difficulties in their clinical teaching role.

- Large groups are a common constraint in the clinical setting in Zimbabwe. This results in a high student nurse-clinical teacher ratio because of the low number of clinical teachers (Bendall 1971:169). Conditions like these reduce the amount of interaction that can take place between student nurses and clinical teachers.
• There is sometimes a conflict of interest between the long-term learning goals of student nurses and the requirements that short-term patient care makes on professional nurses (Orton 1981:65-68). Since patient care demands must always take precedence, planned teaching and learning sessions and activities for student nurses may sometimes have to be abandoned.

• Inadequate equipment and material resources prevent clinical teachers from demonstrating and performing the procedures that are taught in the classroom. This compels clinical teachers to improvise with regard to equipment and this may distort the clinical learning experience of student nurses as it is taught in the classroom (thereby also maintaining the theory-practice gap that most urgently needs to be closed).

• Inadequate role preparation (Karuhije 1986:137-144). This is a common constraint in Zimbabwe because there is no formal training that prepares clinical teachers for their role in Zimbabwe. While clinical instructors are selected on the basis of their presumed experience and interest in teaching, they may manifest serious deficits in knowledge and teaching skills (Fowler 1995:35), and they may also find that they are unable to create the kind of environment in which mutual respect prevails between students and staff and in which student motivation is maximised (Mellish & Wannenburg 1992:122)

• Clinical teachers are not part of the nursing service and do not have the authority to direct and control situations in which student nurses are obtaining their experience (Martin 1959).

• The clinical teachers’ expectations of how to execute their roles may or may not be consistent with those of the service personnel (Hughes 1980:7, in Bond 1984).
• Clinical areas have potentially conflicting points of focus. One may be orientated towards knowledge, understanding and innovation whilst the other may be orientated towards providing service and the standardization of performance (Hughes 1980:7).

• The low status of the clinical teaching staff in comparison to that of classroom teaching counterparts (Martin 1989, Wright 1984:12-14), and the fact that clinical teachers are marginalized and given no real autonomy or responsibility in the practice area (Smyth 1988:621-630), are some of the problems that cause conflict among teaching staff and clinical teachers as well as among clinical staff and clinical teachers.

3.7.4 Characteristics and behaviours of an effective ward sister

During clinical experience, student nurses work under the supervision of ward/unit sisters. Certain characteristics and behaviours of the ward/unit sister can promote student learning and these are discussed below.

• A good ward sister is approachable. The ward sister must be easily approachable and not authoritarian in her/his manner. If she/he is like this, student nurses will be encouraged to ask questions.

• A good ward sister possesses the relevant knowledge/skills and teaching/supervisory skills (Fowler 1995:35-37; Mellish & Wannenburg 1992:127).

• A good ward sister encourages her/his junior sisters to teach and create learning opportunities for student nurses so that even when she/he is away, the student nurses’ educational needs will be taken care of (Fretwell 1980; Pembray 1980; Orton 1981). He or she is also a person who acknowledges the value of other staff in their supervisory roles in patient care and the teaching of student nurses (Mellish & Wannenburg
1992:122). This suggests that if the ward sister is interested in teaching, other professional nurses under her/him will also follow her/his example.

- The ward sister is usually available for student counselling and is someone who encourages student nurses to ask questions so that they can also learn by solving the problems that they encounter. Student nurses should be regarded as a necessary and legitimate part of the ward health team (Dunn & Hansford 1997:1299).

- An effective ward sister turns routine ward work and report sessions into periods of teaching and learning for student nurses (Fretwell 1983:44). She/he regards mistakes made by student nurses as opportunities for teaching — and not for ridiculing or humiliating students. This suggests that nurse teachers must encourage ward sisters to teach and prepare them for this educational role so that they can be effective in what they do.

- A good ward sister allows student nurses to observe his/her clinical practice (Fowler 1995:33-37).

- A good ward sister is able to create and maintain an environment that is conducive to learning (Bendall 1975) by creating an atmosphere of mutual respect and trust and by being competent in his/her practice (Mellish & Wannenburg 1992:122).

- A good ward sister gives guidance with treatment and provides suitable guidance and direction when interventions are made (Fowler 1995:33-37).

- A good ward sister encourages the use of newly acquired skills and makes relevant literature accessible to student nurses (Fowler 1995:33-37).
A good ward sister demonstrates caring and respect and possesses moral integrity (Davies, Hershberger, Ghan & Lin 1990:829-834). She/he also creates an atmosphere of mutual trust and respect in the ward (Mellish & Wannenburg 1992:122).

A good ward sister is able to motivate student nurses to learn by showing that she/he is genuinely interested in their learning needs. She/he also makes resources available so that nursing care can be performed under the best possible conditions (Mellish & Wannenburg 1992:122).

A good ward sister accepts the teaching function and is able to plan and organise her teaching time so that student nurses acquire accurate knowledge about procedures such as, drug administration. She/he also plans short learning sessions that permit students to master specific nursing skills in the ward (Mellish & Wannenburg 1992:150).

If ward sisters are to fulfil the above-mentioned conditions, they need to have realistic and manageable workloads and an adequate staff complement. This is not always the case in Zimbabwe because hospitals sometimes suffer from serious staff shortages and ward sisters may be overburdened with heavy workloads. Another important factor is that ward sisters need to be properly and adequately trained for their supervisory functions. Jacka and Lewin (1989) and Windsor (1987:150-154) found that the quality of ward teaching depends on the variety and frequency of learning opportunities, the facilitation of learning, the integration of theory with practice, and the skills of the teacher.
3.7.5 The teaching roles and responsibilities of the ward sister

About two thirds of the student nurse’s training period is spent in the clinical areas. As the researcher mentioned above, student nurses learn more about nursing care during bedside tutorials and they are also much more highly motivated to learn during clinical placements than they are in the context of classroom teaching. The ward sister, therefore, plays a very important role in the training of nurses (Pembray 1982:20; Gerrish 1990:198-205).

- The ward sister assists student nurses to integrate theory with practice.
- The ward sister teaches student nurses by means of supervision because she/he guides and directs student nurses to improve their performance and render quality nursing care (Mellish & Wannenburg 1992:120; Ives & Rowley 1990).
- The ward sister is a role model for student nurses who learn from him/her by observing his/her exemplary professional attitudes towards patients, relatives and staff (Howie 1988:23-26).
- The ward sister should provide student nurses with learning opportunities (Mellish & Wannenburg 1992:122).
- The ward sister also takes part in the evaluation of student nurses’ performance during clinical assessments.
- The ward sister is a ward manager because she/he manages the activities and care of patients in her/his ward or unit.
- The ward sister should build up a mutual respect between herself/himself and her/his students, and make them aware of their duties and obligations (Mellish & Wannenburg 1992:122).
The ward sister's roles are therefore twofold, that is, they are both educational and managerial (Clarke 1995; Pembray 1982:20). Apart from student nurses, the ward sister's educational role extends to helping, guiding, and directing the other professional nurses who work under her/him. In order to fulfil this important educational function, the ward sister starts by creating an environment which is non-threatening and conducive to learning (Mellish & Brink 1989:220; Elizubeir & Sherman 1995:108; English National Board 1988).

### 3.7.6 Constraints on the ward sister's roles and responsibilities

Clinical staff should also be responsible for the clinical teaching of student nurses (Craddock 1993:217-224). Fothergill-Bourbonnais and Higuchi (1995:37-41) agree with this assertion because clinical staff is regarded as being the most suitable people to conduct clinical teaching because they have an in-depth knowledge of the patient and the ward environment. Ward sisters may, however, suffer under the following constraints, which hinder and undermine the efficiency of their educational role.

- The main role of the ward sister is patient care. The ward sister's *educational* role is therefore secondary. This may mean that the learning needs of student nurses may not be fulfilled. Marrow and Tatum (1994:1247) explored supervision issues in Project 2000 in the United Kingdom and found that supervisors identified role conflict, which they perceived to inhibit teaching of students.

- Jarrat (1983) and Grant, Ives, Raybould & O'Shea (1996:25) found that the ward sisters complain about not being adequately informed by the school about matters of importance, the level of student nurses'
theoretical knowledge and exactly what they are expected to accomplish during clinical placements. This suggests, as already pointed out above, that clinical teaching is often performed in an unsystematic manner. Communication is of the utmost importance in the block system of nurse education. If adequate communication between all stakeholders is not nurtured, student nurses quickly become frustrated and demotivated because they will not be able to link the theory they have learnt with practice.

- Another major problem is that because the ward sister is not accountable to the school of nursing, she/he may not in fact teach unless she is very enthusiastic and committed. Even when ward sisters are enthusiastic and committed, they may be so busy with attending to the needs of patients in their wards that they may not be able to provide the teaching and guidance that they would like to offer.

- If the ward is very busy, student nurse teaching and learning suffers or is delegated to the most junior qualified nurses – or even to other student nurses (Crotty & Butterworth 1992).

- When there are not enough staff appointed to the wards, the supervision and teaching of student nurses is bound to be inadequate (Marrow & Tatum 1994:1253).

- A lack of proper preparation for and education in the teaching and supervisory role will result in inadequate student teaching and supervision (Marrow & Tatum (1994:1247)

The implications of all these observations is that nurse teachers and clinical instructors should be supportive of ward sisters and that good relationships and communication should be cultivated between the nursing school and
clinical areas. Ward sisters should be encouraged to teach by attending continuing education seminars in the art of teaching and in student assessment. Mhlongo (1996:28-31) found in her study of the role of unit/ward sisters in teaching students in Kwazulu hospitals that ward sisters regard good management of their unit as being essential for effective clinical teaching, and that they regarded clinical teaching as one of their most important roles and functions. The school of nursing should make the ward sisters feel that they have a vital function to perform in guiding student nurses to integrate theory with practice and learn whatever they need to know during their clinical placements.

3.8 SUMMARY

This chapter discussed how the teaching and learning environment in nursing education is and how this is also applicable in the general nurse diploma programme block system in Zimbabwe. Student nurses acquire the knowledge, skills and attitudes of a professional nurse in the classroom during study blocks and in various clinical areas during clinical placements. The learning environment in these areas should be conducive to learning if effective learning is to take place. The nurse teacher, clinical instructor and ward sister play very important roles in creating environments, which are conducive to learning, and in facilitating student learning.

Clinical teaching is essential for integrating theory covered during study blocks with nursing practice. It is therefore of the utmost importance that clinical teaching be planned and carried out systematically. Student nurses must be supported during their clinical placements because it has been proven that they frequently suffer from high levels of stress and anxiety.
Good communication and interpersonal relationships between the nursing school and clinical area staff are essential for fostering team spirit.

In the next chapter, the researcher will present and discuss the theoretical framework of this study.
CHAPTER 4

THEORETICAL FRAMEWORK

4.1 INTRODUCTION
A theoretical framework, which is derived from and based on the literature review, guides the whole study and gives it its structure. Burns and Grove (1993:200) define a framework as the abstract logical structure of meaning that guides the development of the study and enables the researcher to link the findings to the body of knowledge that constitutes Nursing Science.

In this study, Malcolm Knowles's adult learning theory (his andragogical model) is used. Brink (1996:20) states that an existing theory may be used to explain the main variables of a study and their interrelationships. Many authors support Brink's view that this is the main function of a theoretical framework (Miles & Huberman 1994:66). The adult learning theory's assumptions and principles form the basis of the theoretical, clinical and attitudinal instruction of student nurses — instruction that enables them to perform their expected and perceived social duties.

4.2 THE ADULT LEARNING THEORY
The adult learning theory espoused by Malcolm Knowles comprises the art and science of assisting adults to learn (Knowles 1980:40-59) and consists of a set of assumptions about the nature of adults and how adults learn. The andragogical model is based on the following five assumptions (Knowles 1978:55-59, Knowles & Associates 1984:9-13):
1. **Assumptions about the learner:**

   The psychological definition of an adult is that he/she is a person whose self-concept includes the quality of being self-directing. Such a person is responsible for his/her own life and has a need to be responsible for himself/herself.

2. **Assumptions about the role of experience:**

   It is assumed that adults enter into an educational experience with a lot of previously acquired experience, which is a rich resource for learning. More emphasis should be put on educational techniques, which use the adult learner's experience. Adults identify themselves with their previous experience and they feel that they are not being treated as adults if their previous experience is ignored, undervalued or simply not regarded as relevant.

3. **Assumptions about readiness to learn:**

   It is assumed that adults are ready to learn when they have a need to learn something in order to perform effectively in some area of their lives. Some of the developmental tasks that adults need to learn may be associated with moving from one stage of development to another such as when a person suffers from a disability (for example, the loss of an arm), or when a close relative dies, or when a child is born. These are but examples of the kind of experiences, which can trigger a readiness to learn in adults. Readiness to learn can also be triggered in adults by exposure to role models who give them opportunities to diagnose their learning needs or who inspire them with the need to be different from what they currently are (i.e. with the need to learn new skills or attitudes).

4. **Assumptions about orientation to learning:**

   Adults enter an educational activity with a task-centred, problem-centred or life-centred orientation because they are motivated to learn after having experienced some deficiency or a need in their life.
situation. Learning experiences for adults should be organized around life situations instead of subject units -- and the relevance of specific learning experiences should be clarified at the beginning of a learning activity.

5. **Assumptions about motivation to learn:**

Adults are motivated to learn mainly by internal motivators such as self-esteem, recognition, a better quality of life, greater self-confidence and self-actualisation (Maslow 1970). However, external motivators such as, the desire to have a better job or obtain a salary increase, are also useful motivators in adult learning.

The andragogical model is a process design (Knowles 1978:108-129; Knowles and Associates 1984:14), which assigns to the learning facilitator the two roles of being both a designer and a manager, and a resource for content, skills and information. The model assumes that, apart from the teacher, there are many other resources such as peers, individuals with specialized knowledge, and material and media resources.

**Elements of the process design**

The andragogical teacher plans a set of procedures, which involve learners in a process, which consists of the following seven elements (Knowles 1978:108-128; Knowles and Associates 1984:14):

- **Establishing the climate.** An environment which is conducive to physical and psychological learning is essential for effective learning.

- **Involving learners in cooperative planning.** Such a process offers adult learners a variety of options for activities. Participation in decision-making encourages commitment in adult learners.

- **Involving learners in identifying their own learning needs.** This may be a process of the needs of learners and those of the organization.
• Involving learners in developing their learning objectives from their identified needs.

• Involving learners in designing their own learning plans. Learners should be helped to identify relevant resources and devise their own strategies so that they understand how to use resources to achieve their learning objectives.

• Helping learners to put their learning plan into practice.

• Involving learners in the evaluation of their own learning. This step includes evaluating whether or not individual learners have accomplished their objectives. It also involves the evaluation of the quality and worth of the total programme.

4.3 APPLICATION OF THE ADULT LEARNING THEORY TO NURSE EDUCATION

The adult learning theory is an educational theory whose principles are applicable to nurse education. A successful nurse education programme has to take into account andragogical assumptions and principles if it hopes to meet the changing needs of adult learners (Mellish & Brink 1990:73).

Any person who is eighteen years old or older is considered to be an adult – although Knowles (1980:24, 43) includes “a person who is performing adult social roles typically assigned by our culture”. Knowles’s addition would be strongly challenged by sociologists who work in cultures in which girls are married well below sixteen years of age and in which they begin to perform adult social roles. In Zimbabwe, however, the majority of student nurses are adults (18 years of age or older) when they are recruited, although the minimum recruitment age has been set at seventeen years.
According to Mellish and Brink (1990:73), when young student nurses come into nurse training, they are already able competently to exercise independent thought and action. Many researchers have also confirmed that student nurses are adults in terms of age as well as in terms of the maturity with which they are able to meet the social and psychological demands that are made on them by society, during their clinical placements (Sweeney 1984; Birchenhall 1985:47; Crotty 1989:207; Burnard & Chapman 1990:44; Darbyshire 1993:328). This is evident in Zimbabwe because student nurses are given a great deal of responsibility in caring for patients or clients because they are regarded as being part of the hospital workforce and they are able to handle such responsibilities. Student nurses also perceive themselves as adults who need to be taught knowledge, skills and attitudes so that they can perform their social roles of looking after the sick and their relatives.

Nurse teachers and clinical supervisors impart the theoretical and clinical knowledge, skills and attitudes that student nurses need to fulfil their learning goals. Nurse education in Zimbabwe is, therefore, problem-based because student nurses are required to apply all their previously acquired knowledge, skills and attitudes to patient care.

Although this adult learning theory is suitable for educating and training student nurses in the general nurse block system, other pedagogical practices and principles are also frequently used. Didactic methods of instruction, such as formal lectures, are used in the general nurse block system where new knowledge, skills and attitudes are imparted to students before they are sent out into clinical settings to apply their knowledge and rely on their own initiative (Knowles and Associates 1984:13). One objective of the present study is to identify the teaching methods that are
used by nurse teachers and clinical supervisors to facilitate student learning in the context of the block system.

4.4 THE ASSUMPTIONS AND PRINCIPLES UNDERLYING ADULT LEARNING THEORY

The assumptions and principles of adult learning theory together with its relevance and application to the present study will now be discussed in detail. The four assumptions of the adult learning theory to be discussed are changes in self-concept, the role of experience, readiness to learn and orientation to learning. These have all been enunciated by Knowles (1978:55-59). The fifth assumption on “motivation to learn” due to mostly internal motivators, such as, self-esteem, recognition and better quality of life is discussed under the four assumptions especially the role of experience, readiness to learn and orientation to learning.

4.4.1 Changes in self-concept

Under conditions that are conducive to optimal physiological and psychological development, a child progressively grows and matures into adulthood. The actions of the child also mature from being parent/guardian directed to self-direction. The point at which a person is able to exercise self-direction coincides with the onset of true adulthood (Knowles 1978:56). At this stage, the person needs to be recognised as a person who can plan for himself/herself and make far-reaching decisions about her/his future. Such a person only wants to be assisted to make a decision: he or she does not want to have the decision made for him/her by an external agency (someone else). If one fails to recognise that a human being has reached the stage when he or she needs to make his or her own decisions, one may cause deep resentment, frustration and other adverse reactions in the person whom one fails to identify as a competent adult learner.
Because adult learners have a powerful and deep drive to be self-directing, they want to be in charge of their developmental destinies and to take control of their own learning processes (Newstrom & Lengnick-Hall 1991:44). Adult educators should foster this drive for self-direction by encouraging (and not denying) adults the opportunity to practise self-direction. Majumdar (1996:43) has also noted that there is a need for curricula of health care programmes to create learning environments which enable students to develop learning skills which they can use in any setting they encounter during their life-span because rapid changes in health and the technology of health care are occurring all the time.

Self-directed learning methods give a much greater degree of control of the learning process to the student. An example of this is the use of a learning contract or learning plan –, which is an agreement between the student and teacher, which outlines the course requirements and expectations of both the student, and the teacher. It consists of the expected course behaviours, student learning objectives, an identification of the resources that might be used, and the kind of evidence that will be used in evaluation, and the terms of the evaluation itself. Self-directed learning activity generates much higher levels of confidence, self-assertiveness and motivation in students than externally imposed learning (Wickenden 1989:3112; Wilson 1993:2233). Self-directed teaching and learning methods are particularly suitable during the clinical area placements of student nurses because very little formal teaching takes place during such times.

According to Candy (1991), in Hayes (1993:177), learner self-direction can be fostered by the following approaches:
• Adult learners can be given the appropriate, encouragement and opportunities to be self-directing.

• Adult learners may be trained in those general skills and attitudes, which are essential if self-directed learning is to be successful.

• Adult learners can be encouraged to foster self-reflection or an awareness of their needs within a particular subject area.

In addition to the above, the teacher must foster a positive attitude towards learning in adult learners. This will serve to enhance their motivation and drive.

When applicants are recruited as student nurses into nurse training programmes, it should be assumed that they have gone through the above processes of becoming self-directing. The very fact that those who are recruited as student nurses have already acquired the necessary academic qualifications to qualify for entry into nurse training programmes, means that they are already achievers in their own right (Knowles 1980:40-59; Hersh 1984:29-44). They will have acquired an enormous amount experience in planning their learning and achieving their qualifications.

While student nurses, like any other adult learners, are quite willing to accept orientation and guidance in their learning programmes, they also want to continue to direct their learning processes in the way that they did before they entered the nurse training programme (Ammon-Gaberson 1987:961-963). They therefore quite rightly resent being looked down upon, prejudged and rigorously controlled as though they had acquired none of the skills and ability to be self-directed – although obviously they are quite ready to accept the guidance of experienced experts in certain situations. Student nurses, like any other adult learners, want to be involved in planning, in carrying out their own learning exercises and in
the evaluation of their own progress towards achieving their professional goals. Learners should therefore be involved in identifying their learning needs, in planning learning activities, in formulating learning objectives and in evaluation (Knowles 1980:47-49; Knowles and Associates 1984:84).

In the general nurse block system in Zimbabwe, however, student nurses may suddenly find themselves sitting in classrooms and writing down large amounts of theory, the relevance of which they may not be able to perceive at the time. The student nurses are then faced with examinations, which determine whether or not they may continue in the training programme before they even experience patient care. It is therefore vitally important for the classroom teacher to explain to her/his students the relevance of what they are being told, and the need for the theory through the citing of relevant and carefully chosen practical examples. It is only in this way that student nurses can be properly motivated to persevere.

Once they have completed their studies in the study block, student nurses may be allocated to clinical areas. Because student nurses are part of the hospital workforce in Zimbabwe, their clinical placement will be dependent on the hospital’s needs for staff – and so the student nurses’ educational needs may be compromised. Most student nurses will be placed in clinical areas even though they had not been taught the theory that is relevant to that clinical area. Thus, for example, student nurses may be placed in surgical wards when they have only been taught the theory of medical care.

Such a situation may become even more critical if a student is placed in an extremely busy area where the professional nursing staff has little or no time to teach or assist student nurses to integrate whatever theory they
might or might not have learnt with practice. The attitude of professional nursing staff must be conducive to effective adult learning and not arrogant, threatening, bullying or dismissive. Professional nurses should try not to be only assessment-orientated.

Two of the major aims of the present study are to find out how nurse teachers and clinical supervisors deal with student nurses who want to be recognised and accepted as adult learners and how student nurses cope with such real-life situations during their education and training. All the above-mentioned situations can be extremely threatening to a student nurses’ self-esteem and this, in turn, may adversely affect their learning.

4.4.2 The role of experience

As children grow and mature to adulthood, they progressively acquire more and more experiences and skills from their environment and their peers. As learning continues throughout life, a person adds more experiences to what he or she acquired in childhood. This means that adults have acquired a lot of experience, which are both a rich resource and the basis for acquiring new learning (Knowles 1978:56). Educators should exploit the fact that every adult learner has acquired a vast repertoire of different personal as well as professional experiences – experiences that can be used in activities such as assignments and projects. Hanson (1995:217) noted that the andragogical model is a model of education, which attributes great value to the life experiences of individual learners. In terms of this model, adults are more experienced than children and can therefore learn more effectively when they use their experience as a basis for new learning (Cherem 1990:25).

The nurse educator should assist by linking a student’s prior experiences to his or her present experience (Cherem 1990:25). Experiential or action
learning techniques such as group discussions, field experience, simulations, problem-solving activities and laboratory work are all ideal learning techniques for adult learners because they afford them the opportunity to use their experiences to obtain solutions to their current problems (Brundage & Mackeracher 1980:97; Knowles and Associates 1984:57). It is hardly therefore surprising that adults tend to resent formal lectures and other transmittal teaching methods, which do not actively involve them and which do not take their life experience into account. While all learners are dependent on their teacher for guidance and orientation when learning knowledge that is new and unprecedented (Knowles 1992:12), it is important to recognise the relevance of prior experience in the practical application of learning in everyday life (Knowles 1980:50). While adult learners are only too pleased to be challenged by alternative explanations of their past life experiences, they resent their own unique understanding of the prior life experiences being dismissed as irrelevant in front of their peers and juniors. It must be realised that all new ideas and perspectives effect changes within the learner, which may not be readily welcomed by adult learners unless their nurse teachers make the relevance of such new ideas to their own situation and problems clear.

It is incumbent upon nurse teachers to identify and exploit this wealth of past experience in any group of student nurses. This observation is even more applicable to student nurses in their final year of training. When teaching the physiology of respiration and respiratory diseases, for example, the nurse teacher can begin by asking the student nurses whether they have ever seen a relative, friend or patient with pneumonia or heart disease. He/she would then ask those who have observed such a patient to describe how the patient looked and breathed. The nurse teacher can then expand on the descriptions, which the students provide. In this way,
teaching and learning are made relevant and applicable to the personal experience of the learners.

A nurse teacher may also utilise group discussions to challenge adult learners to come to grips with intellectual and practical problems. Such personal challenges motivate adult learners (Hoff 1995:7). Peer groups also enable students to experiment and explore new ideas without fear of being humiliated. They provide a safe zone in which students may look critically at the new ideas before they apply them to their learning in their everyday lives.

Adult learners are far more self-reliant and self-directing than children who tend to be more dependent on their teachers (Cherem 1995:25). When adult learners are allowed to learn by using their initiative and contextualising their learning in their life situations, they learn more quickly, they internalise more readily, they tend to retain knowledge more permanently, and they tend to be more confident in the application of new knowledge (Knowles 1992:11). This is very important in nursing education because most teaching and learning takes place in the classroom. It is only after they have been exposed to knowledge in the classroom that student nurses are required to apply the content of what they have learnt in various clinical settings. The quality of education which takes place in a large meeting and which one may compare to the learning that takes place in a classroom setting is affected by the quantity and quality of interaction between the facilitator and the participants or audience (Knowles 1992:11). The effectiveness of this kind of interaction as a learning experience may be increased by each of the following factors:
• The use of visual aids such as chalkboards, flip charts and the inclusion of one or more people in a discussion. These methods introduce variety into the learning experience and exploit the learning capabilities inherent in the stimulation of senses other than the sense of hearing alone.

• Interaction with the audience stimulates adult learners to concentrate and participate actively in their learning. Inviting questions from the audience and the organisation of reaction teams who are responsible for identifying unfamiliar terminology and concepts that need clarification also encourage learning in adults.

• Interaction amongst members of the audience can be promoted if one divides the class into small groups of two to six members and asks each group to draw up the list of questions or issues that they would like the speaker to address. These same groups might be appointed to act as listening teams, which raise points for clarification, elaboration and application.

• Small groups (buzz groups) of four to five members can also be asked to draw lists of points to which they would like the speaker to respond. The groups can also be asked to explain how they would go about applying some of the ideas raised by the groups.

In the study blocks used in the general nurse education programme in Zimbabwe, student nurses' experiences may hardly ever be alluded to because the nurse teacher may be inevitably rushing merely to complete the syllabus within the stipulated time before the end-of-block examinations take place.

Clinical experience blocks are ideal contexts for inviting student nurses to retrieve relevant material from their own experiences but such opportunities are routinely lost because of the shortage of trained staff
and the huge amount of clinical work that has to be accomplished by only a few professional nurses. In the clinical areas, student nurses' experiences may be more likely to be ridiculed than accepted as opportunities to teach and encourage learning.

4.4.3 Readiness to learn
Even after the self-concept of human beings has matured and they have developed into adults, they continue to develop their readiness and capacity to learn whatever new information, skills and attitudes they need to deal with their immediate social, personal and professional problems (Hersh 1984:29-44). In nurse education and training, student nurses quickly learn to cope with the huge volume of information to which they are exposed during study blocks and with the high expectations of both their patients and the patients' relatives when they are placed in clinical areas. The assumption here is that adult learners remain ready to learn things, which are relevant to their life tasks and problems (Knowles 1978:57). They will learn best if they comprehend the reasons why they need to know what they are learning. It is, therefore, important to involve learners in identifying their learning needs, formulating their learning objectives and designing their learning plans through the process of reciprocal negotiation with their teachers. The content in any learning situation, whether it is the classroom or the clinical setting, should be immediately applicable to their lives — and particularly to their social roles. This is particularly important in nursing education where student nurses have to apply their learning in clinical practice. This means that adults will learn best when they understand why they are learning what they are learning in, for example, clinical settings. Under such conditions, student nurses will be motivated to apply themselves to learn as much as they can about the conditions for which the patients whom they are nursing suffer. Adult learners in particular prefer to acquire knowledge
that they may apply immediately rather than knowledge that they may apply on some future occasion (Sweeney 1990:1210).

The level of motivation to learn will depend on the degree of exposure to the complexity of the real life tasks to which students as adult learners are subjected. It is not unusual to find student nurses in their first year of nurse training learning about topics which the curriculum reserves for third year students because they may be nursing patients with just such conditions. They rise to the challenge and deal with the situations with which they are confronted so that they can provide appropriate patient care and meet the expectations of both patients and the patients' relatives and protect their self-concept and self-confidence as student nurses. In nursing, readiness to learn is directly proportional to the extent of their belief that the information they are acquiring is immediately applicable in the context of the professional tasks as student nurses. In the block system of nurse education, the classroom learning experiences should be coordinated by immediate placement in a relevant ward. This however is the ideal implementation of the block system but in practice in Zimbabwe, as has been noted before, this may not occur because most student nurses find themselves in clinical areas for which they have not been prepared by being taught the relevant theory. Even if it were the case that student nurses were placed in relevant clinical areas, they would still find that supervisors on the whole are too busy with essential patient care to help them to integrate their learnt theory with practice.

4.4.4 Orientation to learning (problem-centred learning)

Adult learners are problem-orientated in their learning style (Knowles 1978:58). This means, as we have already noted above, that adult learners are motivated to learn if the knowledge they have acquired is immediately relevant to help them solve their social and professional problems
This means that adult learners want to learn knowledge and skills that are applicable to their work situations. This may include conditions they have already experienced or conditions they expect to encounter in future clinical settings. For adults in general, learning is only regarded as useful if it makes one more competent to solve the problems and tasks, which they will encounter in the future. The same principle applies of course to nurse education. Nurse teachers should ensure that what they teach in the classroom would be applicable to clinical settings. Learning for adults should be sequenced according to problem areas and not subjects (Knowles 1980:54). The present study will try to find out what the student nurses think of the block system of nurse education – especially a study block system which offers theoretical knowledge that has no immediate relevance to practical patient care.

What has been discussed above has implications for the design, organisation and implementation of the curriculum and for student allocation to clinical areas. The curriculum should be designed in such a way that the study blocks are not too prolonged and so that student nurses do not go too long without ever seeing a patient who has an illness or problem. The other important implication of the andragogical model, which emphasises the need for student nurses to study in a problem-centred way, is that classes should be small and student nurses should be supernumerary so that their post-study block allocation to clinical areas can be based on their educational needs and not the needs of the hospital service.

The relevance and applicability of the assumptions and principles of the adult learning theory in nurse education have been discussed above (Burnard and Chapman 1990:40). The attitude of the nurse teacher or/and
supervisor has been examined in terms of the self-concept, experience, readiness to learn of student nurses as adult learners and the significant advantages of problem-centred learning. The success or failure of an adult education programme depends on its teachers. Adult learners prefer the term facilitation because it does not remind them of the authoritarian teachers of their school days. The learner is central in adult learning programmes and this is reflected by the collaboration that takes place between learners and educators in the setting of goals, the assessment of needs, the stipulation of learning objectives and negotiation about what would constitute valid and fair evaluation (Nielsen 1989:87). This means that the responsibility for the teaching and learning processes is shared amongst both teachers and learners. The learner must actively participate in his or her learning and not merely be the passive recipient of content (Knowles 1992:11). A learner-centred system of this kind reinforces the self-directive impulses and needs of adult learners. The facilitator has many roles: they include being a resource person, a task master, a promulgator of values, a group manager, a helper, an expositor, a demonstrator and an assessor (Ruddock 1980, in Hoff 1995:6-7; Knowles & Associates 1984; Burnard and Chapman 1990:44).

Hoff (1995:7), however, emphasizes the need for facilitators to know students well in order to assist them to perform to their full potential. Nurse teachers and clinical supervisors facilitate student learning by role modelling, providing new information and learning materials, and by guiding student nurses in their learning. According to Hanson (1995:217), Hoff (1995:3), Tenant (1991:4) and Newstrom and Lengnick-Hall (1991:44), andragogy promotes a positive psychological climate because andragogical learning is characterized by:

- Openness
• Collaboration between learners and facilitators
• Mutual respect
• Trust
• Support
• Caring
• Participation
• Democracy
• Equality

The above characteristics also help to make learning stimulating, pleasant and challenging. Hoff (1995:3) especially has emphasised the need for learning to be an enjoyable (pleasant) experience.

4.5 THE ROLE OF THE FACILITATOR IN NURSING EDUCATION

In the general nurse block system, facilitators are both the nurse teachers who are the classroom teachers and the clinical supervisors who consist of clinical teachers/instructors and ward sisters. The clinical supervisors are responsible for clinical teaching in the clinical areas. In a successful block system of nurse education, both classroom and clinical teachers and supervisors must work closely together so that the clinical teaching is based on the knowledge and skills that student nurses have recently acquired during study blocks. The present study will try to find out to what extent this important task of liaison is carried out. Both the student nurses and supervisors in the sample will be invited to present their perceptions of the extent to which liaison takes place – and how effective it is in promoting nurse education.

It is important that the facilitator creates an environment that is conducive to student nurse learning. This applies equally to study blocks and the
clinical areas – but more so to the latter. The student nurses must be accepted as adult individuals whose past achievements and experience should be taken into account when they are being taught? In clinical areas, student nurses desire to be treated and accepted as full members of the health team. A good facilitator does not criticize student nurses’ past experiences or achievements but rather orientates them to achieve their professional learning goals. This is done because the facilitator has built up a fund of mutual respect that is based on trust, support and genuine concern for the student nurses’ success and progress (Knowles 1980:43-44). Any mistakes made by student nurses should not be ridiculed but should be utilised as opportunities for teaching and learning. Adult learners resent being ridiculed – especially in front of their peers or their juniors. This means that the style of personal interaction between learners and facilitator has is extremely important. The psychological climate required by the andragogical approaches is characterized by mutual respect between the teacher and learner, and by mutual trust, openness, authenticity, humane treatment, freedom to participate, opportunities to share, collaboration, support and pleasure (Knowles 1984:17; Newstrom and Lengnick-Hall 1991:44). In addition it is the teacher’s responsibility to ensure that the learning atmosphere is caring, accepting, respectful and helpful. Pratt (1993:19) sees this as a type of relationship, which, above all, respects the right of the individual not to be dominated and controlled by those in authority. Unwarranted domination in the teaching and learning settings can hinder the growth and development of the learner.

Student nurses are motivated to learn if they perceive the relevance of what they are being taught. Adults are motivated by things which are personally meaningful to them (Hoff 1995:5) and by their pragmatic desire to be able to use their newly acquired knowledge for solving their immediate problems (Tough 1979:46). It is up to the facilitator to plan
her/his teaching lessons, goals and evaluation after he/she has investigated the extent of what student nurses have already experienced. It is also up to facilitator to ensure that the Health Professions Council’s requirements are fulfilled within the stipulated periods. Adult learners will be highly motivated if they perceive themselves to have taken part in the development and organisation of their own study needs and materials. They will then feel that they are in control of their own learning and their own achievements.

The facilitator must tactly endeavour to educate student nurses in such a way that they become and remain “inner-directed self-operating learners” (Kidd 1973:43; Brookfield 1986:18). This is particularly important in nursing education where student nurses are being specifically prepared to function as independent professional nurses in various clinical settings. Because nursing is both a dynamic art and science, nurses are expected to continue learning so that they can keep their knowledge and skills up to date and so provide good quality nursing care to clients. The motivation of the self-directed learner can be kept high by timely feedback during study and clinical blocks as well as by the provision of a variety of challenging real-life tasks, which are graduated in their complexity as the student nurse becomes more and more experienced. Student nurses may have, for example, learnt about the kind of heart failure that is caused by rheumatic heart disease. Once they have learnt about this kind of heart failure, the facilitator can then take them on to examining a kind of heart failure, which is caused by hypertension and chronic renal failure.

ANDRAGOGY

ADULT LEARNER CHARACTERISTICS

- Self-directing
  - Possess experience to use in teaching and learning
  - Utilise experiential or participatory techniques

- Teaching and learning Transaction is a mutual activity. Teacher acts as a guide, catalyst, and resource person

- Ready to learn what is necessary to perform certain tasks
  - Time Curriculum according to learners' needs
  - Involve learners in assessment of their progress

- Task or problem centred
  - Organise curriculum around problem areas
  - Develop learning experiences according to learner and institution's needs
  - Arrange teaching according to learner's concerns
  - Design learning starting with learner's problems

Enhances motivation and learning

Achievement of learning goals
4.7 SUMMARY

The adult (andragogical) learning theory was utilised as the theoretical framework for the study. Student nurses in the general nurse diploma programme in Zimbabwe and in nursing education in general are all considered to be adults because their age and the responsibilities which they are assigned in the care of patients/clients during clinical placements makes them de facto adults. As adults, student nurses are motivated to learn because they want to know how to solve social and academic problems. Their motivation can be even further enhanced if the nurse teacher (facilitator) cooperates with her/his students in the design of their curriculum so that the curriculum can address what both they and the nurse educator perceive to be gaps and lacunae in their knowledge, skills and attitudes. It is also vitally important to recognize and utilize the student nurses' experiences during teaching. Experiential techniques of instruction have been proven by research to enhance the quality of learning in adults. This makes adult learners feel that they are in control of their learning – and this assurance motivates them. The successful adult learner is nearly always self-directing if the teacher is able to provide the right environment and appropriate challenges.

Nurse teachers must be resource persons and guides to the students. They must avoid being authoritarian and arrogant at all times. Student nurses, like any other adult learners, know that they need the knowledge, skills and attitudes from their teachers if they are to be empowered to practise as professional nurses. Their learning is therefore motivated and centred on the goal of graduating as competent professional nurses. They are motivated to learn so that they can achieve this goal. The nurse teacher should only facilitate students by guiding their learning and evaluating...
their progress towards achieving their own goal of becoming worthy and competent professional nurses.

In the following chapter, the methodology that was used in the study will be presented and described.
CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION
Research methodology refers to the entire strategy of the study from problem identification to the final plans for data collection (Burns & Grove 1993:261). This chapter, therefore, describes the methods used in obtaining, organizing and analysing data as well as the development, validation and evaluation of the research tools or techniques. The purpose of this discussion about methodology is, therefore, to communicate exactly what the researcher did to solve the research problem and answer the research question (Polit & Hungler 1993:53-54). In this chapter the researcher describes the population, the sample and how she selected it, the research design or overall plan that she used for data collection, the data analysis itself, the steps, which she took to minimize bias and control extraneous variables, the data collection methods, the data collection instruments and her opinions about their quality. This chapter also describes the procedures which the researcher used to conduct the study and collect data as well as what she did to protect the rights of the respondents.

5.2 RESEARCH PROBLEM
The research problem, as stated in chapter 1, section 1.2, is that there is prima facie evidence to suggest that the teaching and learning of student nurses in the general nurse training programme block system in Zimbabwe is both deficient and inadequate.
5.3 PURPOSE OF THE STUDY
The purpose of the study was to examine the perceptions of student nurses and their supervisors with regard to the block system, that is used in general nurse training in Zimbabwe, so that both the positive and negative aspects of the system, which either enhance or diminish the quality of teaching and learning in the block system, may be identified.

5.4 OBJECTIVES OF THE STUDY
The study’s overall objectives, as stated in chapter 1, section 1.4, were to:

- determine what the student nurses’ and supervisors’ perceptions of the meaning of the block system are
- identify those positive aspects of the block system that, in the perception of student nurses and their supervisors, enhance the teaching and learning of student nurses
- identify those negative aspects of the block system that, in the perception of student nurses and their supervisors, diminish the quality of the teaching and learning of student nurses
- identify student nurses’ and their supervisors’ perceptions of the managerial and teaching techniques that are used by supervisors when they act as facilitators within the block system- and how both student nurses and their supervisors perceive such techniques.

The study was guided by the research problem and objectives of the study, which, in turn, were based on the theoretical framework of the study. The andragogical theory of Malcolm Knowles was adopted as the theoretical framework to guide this research.
5.5 THE RESEARCH DESIGN

A cross-sectional descriptive survey research design was used in the research to obtain accurate information about the study problem and in order to attain the study objectives. The study design was cross-sectional because the data was collected from the study population at only one point in time (Lobiondo-Wood & Haber 1990:172; Polit & Hungler 1993:146). The data was collected in the form of a one-off recording of existing study events at that particular point in time (Dempsey & Dempsey 1996:92). The recording was not repeated.

The research is essentially descriptive in its methodology. This type of study uses survey methods to collect data about currently existing conditions directly from the research population. Descriptive research of this kind yields both quantitative and qualitative data.

A survey is designed to obtain information about the prevalence, distribution and interrelationships of variables within a study population (Polit & Hungler 1993:148). During the survey, the respondents from the sample answered questions which were either directly asked by the two interviewers (in face-to-face interviews) or else they answered the questions contained in a self-administered questionnaire. The researcher used both these methods to collect data in this study.

The research design was appropriate because it solicited the opinions of a broad cross section of the population. The data was collected from nurse teachers, clinical supervisors and student nurses by means of interviews and self-administered questionnaires. In addition, the research design was practical because it required less time and was less expensive. It was manageable
because it enabled the researcher to collect a lot of data on one occasion. The data collected was therefore more representative of the opinions of respondents regarding what was being studied at the time.

5.6 TIME PERIOD OF THE STUDY
The research study was conducted over a period of five years – between 1995 and 1999. The researcher spent half of that time writing up her proposal and conducting the literature review. Data collection was done from June 1998 to February 1999. Data analysis, interpretation, discussion and writing the thesis took up the rest of the time. The researcher then finalized and presented her thesis in November 2000.

5.7 RESEARCH INSTRUMENTS AND THEIR DESIGN
The data was collected by using structured interviews and self-administered questionnaires, which were designed by the researcher. The choice of a data collection instrument was guided by the needs of the study problem and the purpose of the research. The self-reporting method, by means of which respondents answer questions asked by the researcher using structured interview or self-administered questionnaire, was considered to be an appropriate data collection instrument.

Great care was taken to design and develop the questionnaires in such a way that they would elicit accurate information and responses from the study population. The researcher designed Questionnaire 1 to collect data from student nurses, Questionnaire 2 to collect data from nurse teachers, and Questionnaire 3 to collect data from clinical instructors, sisters in charge and community health sisters. Because of the large number of student nurses in the sample, self-administered questionnaires were used to collect data from them.
This method (self-administered questionnaires) was also used to collect data from community health sisters because they were widely separated by geographical distances.

Structured interviews (which were guided by questionnaires) were used to collect data from nurse teachers, clinical instructors and sisters-in charge in the four central hospitals because the numbers in these samples were small and the respondents were easily accessible.

The questionnaires were used to elicit perceptions from the sample about the block system of nurse education which is used in the three year diploma in general nurse training programme in Zimbabwe. The study population was made up of student nurses at various levels of training and their supervisors.

Closed-ended and open-ended questions were used in the questionnaires to give respondents opportunities to elaborate on their answers (if they wanted to do so). Each questionnaire consisted of the following two sections:

**Section A** dealt with the demographic data of the respondents. The respondents were asked to select the answers that applied to them (Questions 1 to 6 in Questionnaire 1 for Student Nurses, Questions 1 to 5 in Questionnaire 2 for Nurse Teachers and Questions 1 to 7 in Questionnaire 3 for Clinical Supervisors. See Appendix 1, 2 and 3)

**Section B** asked the respondents what their perceptions were of the general nurse training programme block system which is used in Zimbabwe (Questions 7 to 17 in Questionnaire 1 for Student Nurses, Questions 6 to 16 in Questionnaire 2 for Nurse Teachers, and Questions 8 to 20 in Questionnaire 3 for Clinical Supervisors. See Appendix 1, 2 and 3.).
5.7.1 Validity and reliability

5.7.1.1 Validity

The validity of any research instrument is established not only by its ability to measure what it is supposed to measure but also by the degree of accuracy it is able to achieve in measuring data (Stevens, Schade, Chalk & Slevin 1993:101; Dempsey & Dempsey 1996:69). The content of the measuring instrument should therefore be able to provide a sufficient quantity of reliable and representative data about the variables in the study. In the present study, the researcher developed the items in the three questionnaires only after she had carefully defined the kind of data that she wished to obtain from questionnaires (i.e., their content). The questionnaires were then given to experts in nurse education who examined them in terms of their appropriateness and validity in addressing the problem statement and the objectives of the study. These experts in nursing education were asked to examine the questionnaires for their clarity, appropriateness, and relevance and for the content of the items. This scrutiny by impartial experts led the researcher to include a number of other items that would provide additional pertinent information about the perceptions of the block system, which is the researcher's main focus of study. The questionnaires were thus modified on the advice of these nursing science experts.

5.7.1.2 Reliability

While reliability has been differently defined by many authors, they are all in agreement that reliability means that a measuring instrument should yield the same data and results (or that it should be replicatable) every time research is repeated on a comparable sample of respondents in comparable circumstances (Dempsey & Dempsey 1996:70; Stevens et al 1993:99; Fink 1995:41; Polit & Hungler 1993:244). In the present study, the reliability of the questionnaires
produced the same results from the data collected when the questionnaires were pretested on a representative sample.

5.7.1.3 Pretesting of the questionnaires

Pretesting is a critical step in the development of a data-gathering instrument because it tests its reliability, practicality and effectiveness in gathering appropriate data.

The three questionnaires were pretested so that any problems of clarity, ambiguity and relevance in the study design could be corrected before the questionnaires were administered to the main study sample.

The questionnaire for student nurses was pretested on twenty student nurses who had just written their state final examinations. The student nurses were given the questionnaires to answer. An interviewer then undertook structured interviews in which she used questionnaires as interview guides for interviewing nurse teachers and clinical supervisors (the respondents in this part of the pretest were five nurse teachers and five clinical supervisors respectively, who were not included in the main study). The interviewer who conducted the pretest was also not used in the main study to conduct interviews. The data obtained from the pretest was thoroughly analysed and appropriate adjustments (which were minor) were made to the questionnaires (the adjustments consisted mainly of the omission of repetitive and inappropriate items).

5.8 THE SETTING

The research was conducted in the four general nurse training schools in Harare and Bulawayo as well as in the community health services in one province in Zimbabwe. The training schools selected were Harare, Parirenyatwa, Mpilo and
United Bulawayo schools of nursing, all of which are part of the only four central hospitals in Zimbabwe. The province selected for collecting data was Mashonaland East Province.

5.9 POPULATION AND SAMPLE

Population refers to the entire aggregate of subjects who meet the defined criteria of a researcher. The population of the present study were all the student nurses who were undergoing general nurse training, all nurse teachers, all clinical instructors and all sisters in charge of wards/units in the four central hospitals, as well as all community health nurses who supervise student nurses while they are acquiring community experience in Mashonaland East Province.

5.9.1 The sampling design

According to Burns and Grove (1993:235) and Polit and Hungler (1993:174), sampling is a process of selecting a portion of the population. A sample, therefore, is made up of a subset of all the entities, which make up the population. The reason why researchers use a sample instead of the total population is so that they can collect statistically significant data in a practical and efficient way, and so that they can save time as well as resources (Polit & Hungler 1993:175). The subjects who were included in the present study are described below.

5.9.1.1 Student nurses

There are nine groups of student nurses in training at any one time in the four central hospitals because there are three intakes per year (which occur in January, May and September). There are therefore (at any one time) three groups of student nurses in the first year, three groups in the second year and three groups in the third year of training. One group or intake of first year
student nurses, one group of second year student nurses, and one group of third year student nurses from each of the four central hospitals were included in the study. The researcher selected the three groups by using the simple random method. This was done by writing the three groups in the first year on three pieces of paper, placing the three papers in a hat, and then picking one. This was done for the second year and third year groups. This procedure ensured that each of the three groups of student nurses in each year had an equal chance of being included in the study. All the student nurses who were in the first, second and third year groups, which were selected in the four central hospitals, were included in the study. The total numbers of student nurses selected are presented in Table 5.1, and the number who responded to the questionnaires is presented in Table 5.2.

5.9.1.2 Supervisors

Because the total number of supervisors in the four central hospitals and Mashonaland East Province was considered to be small, no sampling was done. All nurse teachers, all clinical instructors, all sisters in charge of wards/units in the four central hospitals and all community health nurses in Mashonaland East Province were therefore included in the study. The various categories of research respondents are presented in Table 5.1 and the total number of respondents is presented in Table 5.2.
Table 5.1: Research Respondents

<table>
<thead>
<tr>
<th>Respondents</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1: Student Nurses</td>
<td></td>
</tr>
<tr>
<td>September 1997 First Year</td>
<td>184</td>
</tr>
<tr>
<td>May 1997 Second Year</td>
<td>190</td>
</tr>
<tr>
<td>September 1995 Third Year</td>
<td>129</td>
</tr>
<tr>
<td>Total</td>
<td>503</td>
</tr>
<tr>
<td>Category 2: Nurse Teachers</td>
<td>40</td>
</tr>
<tr>
<td>Category 3: Clinical Supervisors</td>
<td></td>
</tr>
<tr>
<td>Clinical Instructors</td>
<td>35</td>
</tr>
<tr>
<td>Ward Sisters (Sisters in charge)</td>
<td>66</td>
</tr>
<tr>
<td>Community Health Nurses</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>662</strong></td>
</tr>
</tbody>
</table>

**Category 1:** Student nurses: Data was collected from three groups or intakes of student nurses at each central hospital in their first, second and third years. The data was collected at the time when the student nurses had completed most of the theory instruction and practical experience for their level.

**Category 2:** These were all the qualified nurse teachers in the four central hospitals.

**Category 3:** Clinical supervisors: This category comprised all the clinical instructors and ward sisters in the four central hospitals and community health nurses in Mashonaland East Province.
Table 5.2: Number of respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Structured Interviews</th>
<th>Total number of questionnaires sent out</th>
<th>Total number of respondents used</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First year</td>
<td>184</td>
<td>146</td>
<td>79.3</td>
<td></td>
</tr>
<tr>
<td>Second year</td>
<td>190</td>
<td>157</td>
<td>82.6</td>
<td></td>
</tr>
<tr>
<td>Third year</td>
<td>129</td>
<td>112</td>
<td>86.8</td>
<td></td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td>503</td>
<td>415</td>
<td>82.5</td>
<td></td>
</tr>
<tr>
<td><strong>Category 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Teachers</td>
<td>40</td>
<td>40</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Category 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Instructors</td>
<td>35</td>
<td>35</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Sisters in charge</td>
<td>66</td>
<td>66</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Community Health</td>
<td>18</td>
<td>13</td>
<td>72.2</td>
<td></td>
</tr>
<tr>
<td><strong>Nurses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>141</td>
<td>521</td>
<td>569</td>
<td>86.0</td>
</tr>
</tbody>
</table>

Table 5.2 shows that all the nurse teachers (100%) and hospital clinical supervisors (100%) were interviewed. The response rate was 82.5% for the student nurses and 72.2% for community health nurses –, which is considered to be satisfactory for this kind of study. The subjects studied were only those student nurses and community sisters who had returned the questionnaires, as well as all the nurse teachers and clinical supervisors in the four central hospitals.
5.10 ETHICAL CONSIDERATIONS

According to Brink (1996:38), researchers are responsible for carrying out research in an ethical manner. Such ethical measures include respecting the person's unimpeded right to consent or refuse to take part in a study, as well as the respondents' right to privacy.

The researcher wrote letters to the medical superintendents in charge of the four central hospitals and the Provincial Medical Director of Mashonaland East Province to ask for permission to carry out the study in the four central hospitals and Mashonaland East Province, as was mentioned in chapter 1, section 1.8. The title of the proposed study and its purpose, significance, sample and data collection methods were described, and the data collection instruments were attached to the letters.

The researcher took the letters in person to the heads of the relevant institutions in order to explain her purpose in conducting the research and to answer any questions. Permission was given in writing by all the medical superintendents of the four central hospitals and by the Provincial Medical Director of Mashonaland East Province.

The researcher wrote an introductory letter to accompany the questionnaires. This introductory letter explained the nature of the study, the benefits of the research, and how much time respondents would need to participate in the study. The researcher guaranteed that the information collected would remain private and confidential and that the respondents' right to privacy would be respected. Anonymity was ensured by not having respondents write their names on the questionnaires. The information obtained from the questionnaires was not made available to anyone outside the research team. The researcher
personally visited the institutions to explain the title, purpose, and significance of the research, and the data collection methods that she would use. She also used these visits to obtain the consent of the subjects and answer any questions that the subjects might have.

The subjects were given the option of either consenting or refusing to participate in the study. The subjects were informed that the information collected would not be used against them in any way and that they were therefore free to express their views and feelings. Informed consent was therefore obtained because subjects were given adequate information about the research and because they were also allowed freely to choose whether to participate or not participate in the research.

5.11 DATA COLLECTION PROCESS

Data was collected from the nurse teachers, clinical instructors and sisters in charge of units/wards by means of structured interviews by two interviewers who were not nurses. Data from community health sisters and student nurses was collected by means of self-administered questionnaires, which were distributed by the researcher.

5.11.1 Structured interviews

Data was collected from nurse teachers, clinical instructors and ward sisters by two interviewers who used the printed questionnaires to record responses.

5.11.1.1 The training of interviewers Fink (1995:97) notes that interviewers must be able to elicit the information requested on the survey instrument and record the answers appropriately. The proper training of interviewers is crucial for obtaining reliable and valid survey data. To ensure the above, the researcher
trained the two interviewers so that they would be able to talk and listen efficiently and so that they would also be able to maintain strict neutrality during the interviewing process. The researcher reviewed all the questionnaire items with the two interviewers and answered all their questions so that they would be absolutely clear about what they were asking. The two interviewers were trained together so as to ensure that the data would be gathered in a uniform manner.

After the researcher had obtained permission to conduct the study from the heads of the four central hospitals and Mashonaland East Province, she visited the institutions in person to explain the research and obtain consent from all those who were willing to participate in the research. She also used these visits to introduce the interviewers to the relevant hospital staff and members of the sample group. Appointments were made at times that were convenient to the respondents. The interviews were conducted in offices in the school of nursing as well as in the clinical areas where it was quiet and where there were no disturbances.

5.11.2 Self-administered questionnaires

Self-administered questionnaires were used to collect data from community health nurses and student nurses. The researcher visited Mashonaland East Province on an appointed date when community health nurses from all the districts were having a meeting. The researcher was given an opportunity at this meeting to explain the research purpose, significance, sample, data collection methods and the time that it would take to complete a questionnaire. The researcher then answered any questions which the community nurses asked. The researcher then asked for the consent of all those who were willing to participate in the research (each potential respondent was given the option of
not participating). The supervisors were informed that the information would be confidential and that because they could not be identified, they should feel free to express their views and feelings without reservation.

After she had obtained the necessary consent from the supervisors, the researcher distributed the questionnaires. It was agreed after discussion that the supervisors would hand in their completed (and sealed) questionnaires to the Provincial Nursing Officer when they next visited the provincial offices to collect vaccines. The researcher then arranged with the provincial nursing officer to contact her by phone so that she could collect the completed questionnaires once they had all been returned. Follow-ups were carried out over the phone, and the questionnaires were collected from the provincial nursing officer as arranged.

The researcher first collected data from the third year respondents in the four central hospitals. She then collected data from the first year respondents, and thereafter she collected data from the second year respondents. The researcher visited the nursing schools to explain to the student nurses what her research purpose was, the significance of the research, and her sampling and data collection methods. The student nurses were informed that the questionnaires would take about 40 minutes to answer. The students were then given an opportunity to ask any questions whatsoever. Their consent to participate in the study was sought and all potential respondents were given the option of not participating. When they had given their consent, the researcher distributed the questionnaires and arranged with them to collect them at a later date. In most cases the questionnaires were returned as per the arrangements that had been made. In some cases however the researcher had to make a number of follow-
up visits to remind those who had not returned the questionnaires, to do so. The response rates are indicated in Table 5.2.

5.12 DATA MANAGEMENT

Data coding
The coding of the closed-ended questions was done during the design of the questionnaires. The interviewers coded the questionnaires of the nurse teachers, the clinical instructors and the sisters in charge as they completed the interviews. The researcher checked the coding to ensure that there were no errors in the coding. The researcher then coded the open-ended questions using themes, which were emerging from the content of the data. Similar themes and content categories were given the same codes. The researcher coded the self-administered questionnaires from community supervisors and student nurses in the same manner as has been described above. This took a great deal of time because of the volume of data that was elicited by the open-ended questions and because of the large numbers of questionnaires that had to be coded after they had been completed.

Data analysis
A data entry clerk entered the data into the computer as part of the data collection process. The data cleaning was then performed. This involved checking for errors in data entry or coded outliers.

The data from the three separate questionnaires was analysed on three separate files by the statisticians who used Epi Info and SPSS programs. Descriptive statistics were then used to summarise and break down the data into frequencies and percentages. The researcher used content analysis to analyse the data,
which had been obtained from the open-ended questions. Similar responses were categorized according to themes.

5.13 RESULTS
The results of the data analysis are presented in the following four chapters. Chapter 6 presents and analyses the data that was collected from Questionnaire 1 – the questionnaire designed for student nurses. Chapter 7 presents and analyses the data that was collected from Questionnaire 2 – the questionnaire that was designed for nurse teachers, and Chapter 8 presents and analyses the data that was collected from Questionnaire 3 – the questionnaire that was designed for clinical supervisors. Chapter 9 compares the data from the three questionnaires (where such comparisons are appropriate and helpful).

5.14 SUMMARY
The descriptive research design was used to elicit information about the perceptions of student nurses, nurse teachers and clinical supervisors about the block system used in Zimbabwe. This chapter also describes the research design, data collection instruments, the validity and reliability of the data gathering instruments, the pretesting of the questionnaires, the population and sample, ethical considerations, data collection and data management.

In the next chapter, the data collected from student nurses will be presented and analysed.
CHAPTER 6

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA OF STUDENT NURSES’ PERCEPTIONS OF THE BLOCK SYSTEM

6.1 INTRODUCTION

This chapter presents the data, which was obtained from student nurses who were enrolled in the three-year general nurse diploma programme. The student nurses consisted of three groups from each of the four central hospitals. Each group consisted of student nurses at the end of their first, second and third year of training. There were therefore 12 groups of student nurses from the four central hospitals. The total number of the student nurse sample who responded to the questionnaires was 415, out of a target population of 513.

The purpose of this chapter is to present a profile of the student nurses as well as to describe the various aspects of the block system as perceived by the student nurses. The student nurses were considered to possess views about the block system as they had experienced this system of nurse education.

Data was collected by self-administered questionnaires. The questionnaire items aimed to elicit the perceptions of the student nurses with regard to the block system. The first part of the questionnaire, that is, items 1 to 6, elicited the biographical data of the student nurses. The respondents were asked to circle those answers that applied to them. Items 7 to 17 aimed to elicit the perceptions of the student nurses with regard to the block system. Items 10, 13, 14, 15 and 16 asked the student
nurses to select a positive (yes) or negative (no) response with regard to the block system. Items 11 and 12 asked student nurses to rate given aspects of the block system on the given scale.

Items 8, 9 and 17 were open-ended questions, which asked the respondents to give their views or opinions with regard to the block system.

Descriptive statistics were used to analyse the data. The data obtained from the open-ended questions was analysed using content analysis and similar responses were grouped into categories according to themes.

The data is presented, analysed and interpreted item by item. The data is presented in figures and frequency tables, which reflect order of frequency.

The number of respondents who completed specific items differs because some of the 415 respondents who returned the questionnaires did not respond to all the items. The percentages were calculated based on the number of student nurses who responded to each item (valid percent).

6.2 FINDINGS

Section A: Biographical information

Biographical information was elicited so that the researcher could construct a descriptive profile of the respondents. This was important because it provided a basis from which to analyse the perceptions of the student nurses.
Item 1: Gender

The respondents' gender was asked in this item. The distribution of student nurses in terms of gender is presented in figure 6.1. As figure 6.1 shows, the data revealed that the majority 315 (76.1%) out of 414 respondents were female. Only 99 (23.9%) respondents were male. This is to be expected because nursing has always been a female-dominated profession.

![Figure 6.1: Age and Gender Distribution of Student Nurses](image)

Item 2: Age

Item 2 sought to elicit the age of the respondents. The age was grouped into 4 groups of four-year intervals. The age of the respondents (in groups) is shown in figure 6.1. As is evident in figure 6.1, the majority
242 (58.6%) of the 413 respondents were between 22 and 26 years of age. Twenty-seven (6.5%) respondents were 27-31 years old, and 9 (2.2%) respondents were 32 years and older. Two hundred and seventy eight (67.3%) out of 413 respondents were, therefore, over 22 years of age whilst only 135 (32.7%) out of 413 respondents were 17 to 21 years old. These findings suggest that the huge majority of student nurses are adults and young adults. This finding agrees with Burnard and Chapman (1990:44) and Darbyshire (1993:328) who reported that student nurses are adults when they enrol in nurse training. This finding on age alone suggests that andragogy is most suited for nurse education and training.

**Item 3: Marital status**

This item elicited the marital status of the respondents. The majority (312, i.e. 75.4%) of the 414 respondents were single. However, 102 (24.6%) respondents were married. This finding suggests that student nurses may have compelling social responsibilities beyond their responsibilities as adult learner student nurses. These responsibilities may either hinder or enhance their learning.

**Item 4: Number of children**

This item asked the respondents to indicate the number of children they had, if any. The findings are presented in Table 6.1.
Table 6.1: Frequency distribution of student nurses’ responses to the number of children (n=409)

<table>
<thead>
<tr>
<th>Number</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>348</td>
<td>85.1</td>
</tr>
<tr>
<td>1</td>
<td>47</td>
<td>11.5</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

This table makes it evident that the majority (348 or 85.1%) out of 409, respondents did not have children whilst 61 (14.9%) did have children. This finding suggests that student nurses may, as adult learners, have other social responsibilities such as having and caring for families of their own. The student nurses should, therefore, be treated with respect because (among many other reasons) some of them may be heads of families.
Item 5: Stage of training

The distribution of student nurses by year of training is shown in figure 6.2.

Of the 415 student nurses, 146 (35.2%) were first years, 157 (37.8%) were second years and 112 (27%) were third years. This was expected because schools of nursing had been asked to increase their intakes from 1997 onwards in order to train more nurses to make up for the shortage of nurses in the country. Because the first and second years commenced training in 1997, these groups had larger numbers of student nurses.
Item 6: Training school

The distribution of the sample in terms of training school is shown in figure 6.2. This figure shows that, of the 415 student nurses, higher percentages (143 or 34.5%) and 113 (27.2%) of the student nurses were from Parirenyatwa and Harare Central Hospitals respectively. Only 80 (19.3%) and 79 (19.0%) were from Mpilo and United Bulawayo Hospitals respectively. This is because the former two institutions enrol a larger number of student nurses.

Section B: Student nurses’ perceptions of the block system

Section B of the questionnaire aimed to elicit the opinions or views of the respondents about the positive and negative aspects of the block system.

ITEM 7: Meaning of the block system

This item aimed to find out from the respondents what the term “block system” meant to them. The results are presented in figure 6.3. As figure 6.3 shows, the majority, 223 (73.6%) out of 303 respondents did not clearly understand the meaning of the block system. Only 80 (26.4%) respondents clearly understood the meaning of the block system. This finding indicates that student nurses did not understand the system, which is being used to train them. It is therefore incumbent upon nurse teachers to explain during the first introductory block the meaning of the system of nurse education under which student nurses will be trained.
Figure 6.3: Percentage distribution of student nurses' responses about the meaning of the block system (n=303)

Item 8: Positive aspects of the block system

This item aimed to find out what the respondents perceived the positive aspects of the study blocks and clinical area placements, which promote student nurse teaching and learning to be.
The responses with regard to the positive aspects of study blocks were categorized and are presented in figure 6.4. The total percentages add up to more than 100% as respondents gave more than one response.

![Bar chart showing the positive aspects of study blocks]

Figure 6.4: Student nurses' responses with regard to positive aspects of study blocks (n=415)
Availability of time to acquire knowledge and skills. This factor was mentioned by 237 (57.1%) out of the 415 respondents and was revealed by responses such as:

- Allows concentration on learning academic work without distractions
- Equips student nurses with knowledge and skills in preparation for nursing practice
- Practise without fear of hurting patients

Encourages participatory teaching/learning methods. This was mentioned by 199 (48%) respondents and was revealed by responses such as:

- Use of group discussions and sharing ideas enhance learning experiences
- Group work helps even slow student nurses
- We are allowed to participate freely in our learning process
- Presentations and personal study

All the above-mentioned methods are action-learning methods, which involve the learner.

Facilitation of learning by nurse teachers. This was indicated by 95 (22.9%) respondents and was revealed by responses such as:

- Reasons are given why things are done in a certain way unlike in the wards
- Tutors explain things we do not understand
- Availability and willingness of tutors to clarify all information

Availability of teaching/learning resources. This was mentioned by 85 (20.5%) of the respondents and was clear from responses such as:
• Availability of current books in the library
• Availability of teaching aids

**Availability of time for nursing practicals/demonstrations.** This was mentioned by 57 (13.7%) respondents and was revealed by responses such as:
• Enough time to do return demonstrations
• Opportunities for practical
• Availability of materials for demonstrations.

This finding suggests that student nurses prefer to practise nursing procedures in a classroom setting (which is safe) before doing them on real patients.

**Good interpersonal relationships and a social environment that is conducive to learning.** This was mentioned by 57 (13.7%) of the respondents and was revealed by responses such as:
• Non-threatening atmosphere – treated as adults
• Good student-tutor relationships
• Supportive and encouraging tutors
• Facilitators are free and friendly

This finding emphasizes the importance of a safe, non-threatening environment for students. Lowman (1985), in Reilly and Oermann (1992: 144), highlights the need for the teacher to be warm, open, highly student-centred and predictable if he or she is to be successful in promoting learning.

**Availability of study periods.** This was mentioned by 49 (11.9%) respondents and was revealed by responses such as:
• We have free periods to research
• Personal study time is available
• Individual learning time is available

Evaluation by tests and examinations. This was mentioned by 27 (6.5%) respondents and was clear from responses such as:
• Being asked and answering questions promotes learning
• Weekly tests encourage learning
• Short tests after each topic motivate student nurses
• Mid-block examinations/tests help student nurses to assess their progress.
This finding suggests that tests/examinations motivate students to learn because they provide student nurses with feedback.

Straight off duties. This was mentioned by 11 (2.6%) of the respondents and was revealed by responses such as:
• There are straight off duties which is less strenuous
• Study blocks give time to rest and study
• Students are relaxed because of straight-off duties and weekend offs
This finding suggests that student nurses get a break during study blocks from the stresses of the clinical setting. This advantage is similar to that which was reported by Searle (1982:52-53).

Clinical area visits. This was mentioned by 7 (1.7%) respondents. This was clear from responses such as:
• Ward visits after learning a topic gives us real-life experiences
• Put theory into practice during ward visits
• Doing procedures on real patients encourages learning
Positive aspects of clinical area placements

These are shown in Figure 6.5. The responses add up to more than 100% as some respondents gave more than one response.

Figure 6.5: Student nurses’ responses with regard to the positive aspects of clinical area placements (n=415)

As figure 6.5 illustrates, the positive aspects of clinical area placements were categorized as follows:
Integration of theory and practice. This was mentioned by 255 (61.5%) out of 415 respondents and was clear from responses such as:

- Allows application of theory and practice
- Allows comparison of theory and practice
- Provides real-life experiences and this allows consolidation of theory

Learning and practice of skills. This was mentioned by 108 (26%) respondents and was revealed by responses such as:

- There are opportunities to gain confidence in doing procedures
- Opportunities to learn and practise skills
- Improve and enhance skills development

Good interpersonal relationships between qualified staff and student nurses and team spirit. This was mentioned by 88 (21.2%) respondents and was revealed by responses such as:

- Good student nurse-sister relationships
- There is respect for each member of the health team
- Helpful trained staff members who assist student nurses with procedures
- Sharing work equally especially among all staff

This finding suggests that student nurses value and like a learning environment where relationships are good and where they are respected and accepted as useful members of the health team.

Teaching/learning activities carried out in the wards. This was mentioned by 68 (16.4%) respondents and was revealed by responses such as:

- Demonstrations of procedures by ward sisters
• Student-led discussions are held
• Post ward round reports/treatment time, especially the 11.00 hours report
• Learning during ward rounds with Doctors and Matrons

This finding suggests that there are many opportunities for student nurses to learn during report time and ward rounds by doctors and qualified staff.

Clinical placements should be based on content covered during study blocks. This was mentioned by 45 (10.8%) respondents and was revealed by responses such as:
• Contact with theoretically familiar conditions
• Allocated to do previously demonstrated practical in wards
• Practise nursing care to certain individuals
• Practical procedures covered in class are practised in the wards

This finding suggests that the clinical placements are sometimes based on content covered in the school of nursing and that procedures taught in class are relevant in the clinical setting.

Qualified staff should perform supervision/teaching. This was mentioned by 36 (8.7%) respondents and was clear from responses such as:
• Doing practical while being monitored by qualified staff
• Seniors who participate in teaching juniors and student nurses, usually sister-in-charge
• Regular follow-ups which provide feedback and correct mistakes
• Tutorials and bedside teaching by clinical supervisors.
Availability of clinical instructors. This was mentioned by 35 (8.4%) respondents and was revealed by responses such as:

- Availability of a clinical instructor in the ward
- Clinical instructors who teach
- Follow-ups with clinical instructors
- Clinical teaching and supervision by clinical instructors

Practical assessments. This was mentioned by 24 (5.8%) respondents and was revealed by responses such as:

- Doing assessments
- I can evaluate my nursing care
- Follow-ups and assessments create a desire to read and learn

Peer teaching. This was indicated by 13 (3.1%) respondents and was indicated by responses such as:

- Discussions with senior students
- Student-to-student contact/teaching is important
- Willing to teach other student nurses

Encourages self-directed learning. This was revealed by 2 (0.5%) respondents and was clear from responses such as:

- Enables you to research and learn without a teacher
- Can read up about conditions of patients on the ward

This finding suggests that some student nurses are motivated to learn during clinical area placements. This is similar to what was reported by Alexander (1984:4) who found that student nurses' motivation to learn was high during clinical area placements. This may be because the
student nurses understand the value and relevance of the knowledge they have acquired when they have to apply it to patient care.

**Item 9: Negative aspects of the block system**

This item aimed to find out from the respondents what they perceived the negative aspects of the study blocks and clinical placements, which do not promote learning to be.

The negative aspects of study blocks are presented in figure 6.6. The responses add to more than 100% because some respondents gave more than one answer.

![Figure 6.6: Percentage distribution of student nurses' responses with regard to negative aspects of study blocks which do not promote student teaching and learning (N=415)](image)

**Figure 6.6: Percentage distribution of student nurses' responses with regard to negative aspects of study blocks which do not promote student teaching and learning (N=415)**
As is evident in figure 6.6, the negative aspects of study blocks were grouped into the following categories:

**Too much block content.** This was indicated by all 344 (82.9%) of the 415 respondents. This was revealed by responses such as:

- Too much information covered in a short time
- Forced by shortage of time to memorize
- Information covered swiftly
- Stress and inability to cope with too much content
- Taking notes for learning later
- Too much dictation

This finding suggests that excessive content is covered within the short time provided by study blocks and that this results in ineffective learning. This finding is similar to that of Bolwell (1994), in Beeson (1999:357), that faculty members often simply do not have enough time to teach clinical content, to allocate practice time for students, and to evaluate the performance of skills.

**Inadequate resources and physical facilities.** This was mentioned by 133 (32%) respondents. This was revealed by responses such as:

- Shortage of equipment, teaching aids, books demotivates student nurses
- Overcrowding in poorly aerated [sic] classrooms causes lack of concentration
- Physical environment not conducive to learning.

This finding suggests that teaching aids, equipment, books and classrooms are not adequate.
Lack of study periods. This was indicated by 116 (28.0%) respondents. This was clear from responses such as:

- No/few study periods on the timetable
- Some blocks hardly have study periods for individual learning
- No time for revision
- Lectures given during examinations
- Examinations come too early and are too close to one another. This finding suggests that student nurses do not get enough time to learn and understand content before examinations. This is in conflict with what was recommended by Mellish and Brink (1990:103) when they suggested that new material should not be provided just before examinations. This finding also suggests that formal teaching methods are used most of the time and student nurses are not given adequate time to do individual study.

Poor interpersonal relationships with nurse teachers. This was mentioned by 62 (14.9%) of the respondents. This was revealed by responses such as:

- Frustration from some tutors
- Attitudes of nurse teachers who look down on some slow students, for example, viewed as dull
- Some tutors make us fear them
- Poor, bad and negative attitudes of nurse teachers demotivate student nurses

This finding suggests that some tutors are authoritarian and do not create an environment that is conducive to learning for student nurses. This finding is similar to what was reported by Clinton (1992:4-6), who
found that nurse teachers were found to manifest an unnecessarily authoritarian attitude towards student nurses.

**Group work excessive and ineffective.** This was mentioned by 27 (6.5%) respondents and this was revealed by responses such as:

- Too much group work
- Group work is not effective
- Group work without more clarification from nurse teachers is not useful
- Group work makes students concentrate on their own case presentations only and study nothing else

This finding suggests that student nurses are given too much group work and the group work is not effectively done. This implies that student nurses do not learn much from groups unless nurse teachers are themselves involved in the group work.

**Lecture method of teaching not preferred.** This was mentioned by 27 (6.5%) of the respondents. This was clear from responses such as:

- Lectures monotonous
- Too much time spent sitting, writing notes that are dictated
- No explanations during lectures and therefore retention is low
- Less student discussions during lectures.

This finding suggests that student nurses dislike lectures. This is similar to what was reported by Harvey and Vaughan (1990: 181-185), who found that student nurses disliked lectures.

**Theory-practice gap.** This was mentioned by 17 (4.1%) of the respondents. This was revealed by responses such as:
• Sometimes what we learn in theory we never come across in clinical areas
• All aspects of the clinical area are not covered
• Content does not seem to change with current trends
• No teaching is made for student nurses to cope with psychological needs of patients

This finding suggests that student nurses perceive differences between what is taught in the school of nursing and nursing practice in the clinical settings.

**Shortage of nurse teachers.** This was mentioned by 20 (4.8%) respondents. This was revealed by responses such as:

• Shortage of tutors
• Facilitators are inadequate resulting in not finishing all topics

This finding suggests that some nursing schools have inadequate nurse teachers. Mellish and Brink (1990:104) recommend that the teaching personnel should be adequate and properly trained to implement the block system successfully.

**Inadequate time is allocated for nursing practicals/demonstrations.** This was mentioned by 6 (1.4%) of respondents. This was clear from responses such as:

• Less time for doing demonstrations
• Lack of demonstrations
• Student nurses do not get enough time to do return demonstrations of vital procedures
• Nurse teachers should ensure that student nurses have adequate time to practise procedures in a classroom setting which is safe.
• It becomes difficult in the clinical area to practise something you have never done.

This finding suggests that theory is far more emphasised than nursing demonstrations. This would widen the gap between theory and practice. This finding concurs with that of Beeson (1999:357), who noted that students who have the opportunity to practise skills in a safe, controlled, non-threatening environment such as the school laboratory are better prepared and less apprehensive when they go on the clinical area.

The negative aspects of clinical area placements are presented in figure 6.7. The responses add up to more than 100% because some respondents gave more than one response.
Overworking of students
Shortage of qualified staff
Inappropriate duties
Inadequate supervision/teaching
Inadequate resources
Poor interpersonal relationships
Inadequate teaching by tutors and clinical instructors
Placements not based on study block content
Inadequate clinical instructors
Excessive night duty

45.3\% (188)
30.1\% (125)
29.4\% (122)
22.7\% (94)
15.7\% (65)
13.5\% (56)
12.0\% (59)
7.5\% (31)
4.8\% (20)
4.6\% (19)

Figure 6.7: Percentage distribution of student nurses’ responses with regard to the negative aspects of clinical area placements (n=415)

As illustrated in figure 6.7, respondents gave several responses with regard to the negative aspects of clinical area placements. Their responses were categorized as follows:

**Overworking of student nurses.** This was indicated by 188 (45.3\%) out of 415 respondents and was revealed by responses such as:

- Too much work for student nurses
- Sisters overburden student nurses
- Sisters do not want to work when we are there
• No time to learn because of too much work
• Clinical areas are too busy for learning.
This finding suggests that the learning needs of student nurses are not considered. A good learning environment is a place where student nurses are given a variety of learning opportunities (Jacka & Lewin 1986:253). The above comments suggest that the students are too tired to study at the end of their shifts.

**Shortage of qualified staff.** This was mentioned by 125 (30.1%) of respondents. This was revealed by responses such as:
• Allocated to busy wards with shortage of trained nurses
• Everybody is too busy to teach
• Off duties are made to cover wards which have staff shortages and not student nurses’ learning
• Student nurses are made to cover for staff shortages
This finding suggests that the environment in the wards is not conducive to learning. An adequate staff complement is a prerequisite for a successful implementation of the block system (Mellish & Brink 1990:104).

**Inappropriate duties.** This was mentioned by 122 (29.4%) of the respondents and was revealed by responses such as:
• We spend most of our time doing errands, such as, escorting patients to other departments and collecting linen
• Given dirty work all the time
• Always sluicing linen
• No time to practise for assessments and do procedures
• Given nurse aid tasks to do
This finding suggests that student nurses are used as basic unskilled workers in the hospitals and that their learning needs are compromised.

**Inadequate teaching/supervision of student nurses.** This was mentioned by 94 (22.7%) respondents and was revealed by responses such as:

- Improper supervisory aspects.
- Lack of student nurse supervision
- Sisters always too busy to supervise student nurses
- Some sisters are unwilling to teach or assist with procedures.  
  [NOTE: 54 (13%) respondents mentioned this.]
- Some trained staff refuse to assist student nurse learning or to do follow-ups

This finding suggests that student nurse teaching suffers because of the dual role of qualified staff with regard to patient care and teaching student nurses. This finding is similar to that noted by Crotty and Butterworth (1992), who found that if the ward sister is busy, student nurse teaching and learning suffers or ends up being delegated to the most junior qualified nurses. Kirkpatrick, Byrne, Martin and Roth (1991:102) also noted that problems with regard to providing high quality supervision may be due to lack of practitioner role models and inadequate or unsupportive learning environments. Quality supervision is fundamental for the consolidation of knowledge and the development of a professional identity for student nurses.

**Inadequate resources.** This was mentioned by 65 (15.7%) respondents. This was clear from responses such as:

- Lack of equipment prevents students from doing procedures as taught
• Too much improvisation

This finding suggests that inadequate resources prevent students from doing procedures as taught. This is a cause for the gap between classroom teaching and practice in the wards. Ellis (1965) found that transfer of learning is maximal when the theory that is taught in the classroom corresponds to what is taught in clinical situations.

**Poor interpersonal relationships.** This was mentioned by 56 (13.5%) respondents and was revealed by responses such as:

• Poor attitudes of qualified staff and viewed as dull
• Sisters are fault-finding
• Unapproachable and impatient sisters
• No praise for hard work
• Being shouted at in front of patients
• Student nurses suggestions are ignored
• Discouraging comments by clinical instructors during follow-up
• Clinical instructors are harsh and authoritarian
• Some tend to harass not to teach nicely

This finding suggests that the social environment during clinical area placements is unconducive to student learning. According to Wong (1978:369) and Reilly and Oermann (1992:5-6), student nurses learn from clinical instructors who are approachable, respectful and who have good interpersonal relationships with individual student nurses or groups.

**Inadequate teaching by nurse teachers and clinical instructors.** This was mentioned by 59 (12%) of the respondents. It was revealed by responses such as:
• No bedside teaching or follow up by clinical instructors except for assessment
• No follow-ups from the school due to shortage of clinical instructors. This finding suggests that nurse teachers and clinical instructors seldom do clinical teaching and that what is done is largely done because of the requirements of practical assessments.

Clinical area placements are not based on the content covered during study blocks. This was mentioned by 31 (7.5%) of the respondents and was revealed by responses such as:
• Placement in clinical areas is not complemented by information from a recent study block
• Placement to clinical areas occurs before learning relevant theory or long after theory was done
• Faulty allocation making follow ups and assessments difficult to finish
• Placements to departments are broken into two, making follow-ups/competencies difficult and strenuous to finish in the stipulated time

This finding suggests that there are problems with clinical allocation and that it is done according to hospital needs for staff and not according to what has been covered in the study blocks or the needs of student nurses' education.

Inadequate clinical instructors. This was indicated by 20 (4.8%) respondents and was revealed by responses such as:
• Shortage of clinical instructors for follow-up
• Little time with clinical instructors
Excessive night duty. This was indicated by 19 (4.6%) respondents and was clear from responses such as:

- Doing night duty after night duty especially when changing wards
- Frequent night duty in only one clinical area hinders our learning
- Night duties are too many

Theory-practice gap. This was indicated by 9 (2.2%) of the respondents and was clear from responses such as:

- What was learnt in class differed from ward practices
- There is no application of theory to practice
- Nurse teachers are unaware of practices in the wards

Only third year students get the chance to do ward rounds. This was indicated by 2 (0.5%) respondents and was revealed by the following responses:

- Ward rounds are only done in the third year in preparation for the ward management assessment
- All level of students must do ward rounds

Clinical teaching is assessment orientated. This was mentioned by 3 (0.7%) respondents and was revealed by responses such as:

- Follow-ups by clinical instructors are done before assessments only
- Once a student does an assessment it is assumed that he knows everything thereafter

This finding suggests that student nurses perceive that clinical teaching is only done in preparation for assessments.
ITEM 10a: Organization of study blocks

This item aimed to find out whether study blocks were organized in a way that promoted student nurse teaching and learning. The responses are presented in table 6.2.

TABLE 6.2: Student nurses' responses with regard to whether study blocks were organized to promote teaching and learning (n=372)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
</tr>
</tbody>
</table>
183   | 49.2 |
189   | 50.8 |
372   | 100 |

As is evident from table 6.2, slightly over half, 189 (50.8%), out of 372 respondents felt that study blocks were not well organized. However, 183 (49.2%) of the respondents felt that the study blocks were well organized. This finding suggests that the study blocks are not well enough organized to promote student nurse teaching and learning.
The respondents who gave a positive answer were asked to explain how the organization of the study blocks helped their learning and those who gave a negative answer were asked to state how the organization did not help their learning. The responses were categorized and they are presented in figure 6.8 and figure 6.9 respectively. The percentages add up to more than 100% because some respondents gave more than one response.

![Graph showing percentage distribution of student nurses' responses with regard to how the organization of study blocks helps their learning](image)

**Figure 6.8:** Percentage distribution of student nurses’ responses with regard to how the organization of study blocks helps their learning (n=183)
As figure 6.8 shows, the respondents who agreed that study blocks were well organized gave several reasons why the organization of study blocks helped their learning.

- Study blocks were well spaced and they prepared students for clinical area placements responsibilities (116 respondents: 63.4%).
- There is time for students actively to participate in learning (25 respondents: 13.7%).
- Practical procedures taught during study blocks are practised in the clinical areas (23 respondents: 12.6%).

The following four reasons are also mentioned and are discussed under the positive aspects of study blocks:

- Time was available for student nurses to do individual study (19 respondents: 10.4%).
- End of block examinations were helpful to their learning (12 respondents: 6.6%).
- The nursing demonstrations that are done during study blocks are helpful to learning instead of concentrating on theory only (9 respondents: 4.9%).
- There were opportunities to integrate theory and practice by going to the wards to see patients with conditions being taught in class (8 respondents: 4.4%).
Figure 6.9: Student nurses’ responses with regard to how the organization of study blocks did not help their learning (n=189)

The total percentage adds up to more than 100% because some respondents gave more than one response. As figure 6.9 illustrates, 189 (50.8%) out of 372 respondents who said that the study blocks were not organized in a way that promotes their teaching and learning gave several examples of what does not help their learning.
The following reasons were also given under negative aspects of study blocks in Item 9:

- The study block content was too much for the period of study blocks (189 respondents: 100%).
- There was lack of individual study and revision periods (42 respondents: 22.2%).

The following reasons were also given:

- Clinical area placements were not based on the content, which was covered in study blocks (10 respondents: 5.3%).
- Study blocks were sometimes postponed (5 respondents: 2.6%).
- Nurse teachers are unaware of practices in the wards (4 respondents: 2.1%).
- Demonstrations during study blocks were inadequate (4 respondents: 2.1%).

These findings suggest that the block system is sometimes not effectively implemented. Melllish and Brink (1990: 104) recommend that nurse teachers be familiarised with current practices in the wards. Student nurses' placements should also be related to the theory and the subject content that has just been covered if the block system is to be successfully implemented.

**Item 10b: Organization of clinical area placements**

This item aimed to find out whether clinical area placements were organized in a way that promotes student learning. The responses are presented in table 6.3.
Table 6.3 Student nurses' responses with regard to whether clinical area placements are organized to promote student teaching and learning (n=368).

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>184</td>
<td>50</td>
<td>184</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 6.3 shows that 50% of the respondents (184) out of 368, felt that clinical area placements were organized in a way that helps their learning while exactly the same number (184 or 50%) felt that clinical placements were not organized in a way that helps their learning. These findings suggest that there are problems with the way in which clinical area placements are organized in the block system of nurse education.

The student nurses who responded to this question were asked to give reasons for their perception that clinical area placements were organized in a way that promoted or did not promote their learning. These responses are presented in figures 6.10 and 6.11. The responses add up to more than 100% because some respondents gave more than one response.
The responses which were given by the 184 (50%) out of the 368 respondents with regard to how the organisation of clinical placements help learning are illustrated in figure 6.10. They were:

- The time allocated for clinical area placement was adequate (118 respondents: 64.1%).
- The practical work, which was done during clinical area placements, promoted learning by experience (56 respondents: 30.4%).
- Clinical area placements promoted skills development (20 respondents: 10.9%).

**Figure 6.10: Student nurses' responses with regard to how the organization of clinical placements helps their learning (n=184)**
Student placements are based on hospital needs

Shortage of clinical supervisors

Qualified staff unwilling to teach students

Inappropriate duties/tasks

Inadequate resources

Theory-practice gap

73.4% (135)

12.5% (23)

10.8% (20)

8.7% (16)

4.9% (9)

3.3% (6)

Figure 6.11: Student nurses' responses with regard to how the organization of clinical area placements does not help their learning (n=184)

Figure 6.11 shows that 184 (50%) out of 368 respondents said that clinical area placements were not organized in a way that promoted learning (they also gave several reasons for these perceptions). These reasons however were the same as the reasons given and discussed under negative aspects of clinical area placements in Item 9:
• Student clinical area placements were based on hospital needs for staff and not on student nurse learning needs (135 out of 184 respondents: 73.4%).

• There is a shortage of clinical supervisors (23 respondents: 12.5%).

• Student nurses are asked to perform inappropriate duties/tasks (such as the running of errands) most of the time (16 respondents: 8.7%).

• There were inadequate resources such as equipment and supplies (9 respondents: 4.9%).

• There is a theory-practice gap because procedures were not performed in the same way as they were taught in class because of staff and equipment shortages (6 respondents: 3.3%).

The other reason that was given was as follows:

• Qualified staff was unwilling to teach student nurses (20 respondents: 10.8%). This finding suggests that some qualified staff neglect their teaching responsibilities. Interest in teaching by qualified staff is necessary for any successful implementation of the block system (Mellish & Brink 1990:104). Applicants for staff positions should be made aware before they are recruited that teaching, in all its forms, is one of their non-negotiable duties.

Item 11a: Extent to which specific teaching methods are used

This item aimed to find out from the respondents the extent to which the specific teaching methods were used during study blocks. Respondents rated their views on a four-point scale of “always”, “often”, “seldom”, and “never”. The rating scale was collapsed into two groups by combining the two points “always and often” into one, and the two points “seldom and never” into one.
The findings with regard to the extent to which specific teaching methods were used during study blocks are presented in figure 6.12.

Figure 6.12: Student nurses’ responses about the extent to which specific teaching methods are used during study blocks

Figure 6.12 shows that the methods of teaching that were used most frequently during study blocks were lectures, demonstrations, and tutorials led by tutors. The methods that are less frequently used are role-play, case studies and ward rounds.
Lectures
Figure 6.12 shows that the majority (380 or 95.7%) out of 397 respondents felt that lectures are “often to always” used during study blocks. Only 17 (4.3%) respondents felt that lectures are “seldom to never” used. This finding shows that the lecture method is used almost exclusively during study blocks.

Thirty-three out of 397 respondents made comments about the use of lectures during study blocks. The comments about lectures given by 8 (24.2%) out of 33 respondents were categorized as follows:
- Teaching is carried out mainly by means of lectures. This was revealed by responses such as “teaching is mainly by lectures”, “information dictated while students take notes” and “lectures lack feedback”. The above responses confirm that lectures are demotivating to adult learners who want to be involved in their learning. This finding implies an over reliance on teacher-centred teaching methods. This method of teaching adults is not consistent with the principles of andragogy, which recommend action-learning techniques that provide learners with opportunities to utilise their experience to solve the problems, which they encounter (Brundage & Mackeracher 1980:97).

Demonstrations
The majority of respondents (313 or 78.1%) out of 401 felt that demonstrations were “often to always” used. However, 88 (21.9%) respondents felt that demonstrations were “seldom to never” done. This finding suggests that demonstrations are frequently used in teaching during study blocks. The use of démonstrations motivates learners
is a practical profession, demonstrations are especially appropriate in the teaching of nursing – a profession in which many practical skills have to be learnt and perfected.

**Student-led discussions**

Table 6.4 shows that 244 (60.7%) out of 402 respondents felt that student-led discussions were “often to always” used. However, 158 (39.3%) respondents felt that they “seldom to never” took place. The findings in the table below suggest that the student-led discussion method was used more often in schools, which have small classes of student nurses. This finding suggests that student-led discussions are sometimes used during study blocks and that student nurses sometimes get the opportunity to share ideas with peers and teachers during student-led discussions. Student-led discussions are student-centred teaching/learning methods which motivate learners and which are recommended for adult learners.

**Table 6.4: Use of student-led discussions during study blocks by training school (N=402)**

<table>
<thead>
<tr>
<th>TRAINING SCHOOL</th>
<th>RESPONSES</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Often to Always</td>
<td>Seldom to never</td>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>HARARE</td>
<td>60</td>
<td>56.1</td>
<td>47</td>
<td>43.9</td>
<td>107</td>
</tr>
<tr>
<td>PARIRENYATWA</td>
<td>61</td>
<td>43.9</td>
<td>78</td>
<td>56.1</td>
<td>139</td>
</tr>
<tr>
<td>MPILO</td>
<td>70</td>
<td>88.6</td>
<td>9</td>
<td>11.4</td>
<td>79</td>
</tr>
<tr>
<td>UNITED BULAWAYO</td>
<td>53</td>
<td>68.8</td>
<td>24</td>
<td>31.2</td>
<td>77</td>
</tr>
<tr>
<td>TOTAL</td>
<td>244</td>
<td>60.7</td>
<td>158</td>
<td>39.3</td>
<td>402</td>
</tr>
</tbody>
</table>
Role play
Most of the respondents, namely 301 (80.9%) out of 372, felt that role-plays are “seldom to never” used. Only 71 (19.1%) of the respondents felt that they were “often to always” done. The respondents commented that role-plays were rarely done. This was revealed by respondents’ responses such as, “there should be more role plays”. This finding suggests that this method is not commonly used in study blocks although it is a good method to teach attitudes, which are very important in nursing. The reason why role-plays are rarely used in schools of nursing in Zimbabwe is that they need time to set them out effectively.

Care plan presentations
Although 198 (51%) out of 388 respondents felt that care plan presentations were “often to always” used, 190 (49%) respondents felt that they were “seldom to never” done. This was revealed by responses such as “a care plan presentation should be done after doing a condition” in class. This would allow student nurses to apply what they have learnt. This response supports the principle of andragogy, which is noted by Knowles (1980:45) and Hersh (1984:29-44), that adult learners are motivated to learn if the knowledge they acquire can help them to solve their immediate social and professional problems.

Ward rounds
A higher percentage, 206 (75.3%) out of 393 respondents, felt that ward rounds were “seldom to never” used for teaching during study blocks. However, 97 (24.7%) respondents felt that ward rounds were “often to always” done. This finding suggests that ward rounds are not usually used for teaching purposes during study blocks.
Case studies
A higher percentage, namely 295 (78.5%) out of 376 respondents, felt that case studies are “seldom to never” used as a teaching method during study blocks. However, 81 (21.5%) of the respondents felt that case studies are “often to always” used. Case studies are used for student nurses who are in the clinical area as a prerequisite to the Total Patient Care Assessment (Third Assessment), which is done in the third year of training. The respondents (81 respondents: 21.5%) who felt that case studies were done may have been in their third year of training.

Tutorials led by nurse teachers
A higher percentage, namely 310 (80.1%) out of 387 respondents, felt that tutorials led by nurse teachers are “often to always” held during study blocks. However, 77 (19.9%) of the respondents felt that tutorials led by tutors are “seldom to never” held. This finding is to be expected because nurse teachers are based in the nursing school.

Item 11b: Extent of use of the specified teaching methods during clinical area placements
The aim of this item was to find out from the respondents the extent to which the specified teaching methods were used during clinical area placements. The findings are presented in figure 6.13.
Figure 6.13: Student nurses' responses about the extent to which specified teaching methods were used during clinical area placements

As is evident from figure 6.13, ward rounds are the most frequently used method during clinical area placements, followed by demonstrations. The methods, which are less frequently used, are tutorials led by nurse teachers, case studies and lectures.

Lectures
The majority of respondents, namely 286 (71.9%) out of the 398, felt that lectures were “seldom to never” used during clinical placements. However, 112 (28.1%) of the respondents felt that lectures were “often
to always” used. This finding suggests that lectures are not usually used during clinical area placements – although almost a third of student nurses said that lectures were used in the clinical areas.

Demonstrations
The majority, namely 232 (58.3%) out of 398 respondents, felt that demonstrations were “often to always” performed during clinical area placements. However, 166 (41.7%) respondents felt that demonstrations are “seldom to never” performed. This finding is unexpected because student nurses learn a lot of psychomotor skills in the clinical areas. One would expect to find a higher percentage rating of learning by demonstrations in clinical area teaching than the 232 (58.3%) out of 398 respondents –, which is the figure that showed up in the data.

- Student-led discussions
The majority, namely 254 (64.5%) out of 394 respondents, felt that student-led discussions are “seldom to never” used during clinical area placements. However, 140 (35.5%) respondents felt that student-led discussions were used “often to always”. This finding suggests that the opportunity for students to share ideas is actually reduced during clinical area placements. Since student nurses of all levels may sometimes work together on a patient, student-led discussions should be encouraged so that they can learn to develop the confidence they need to present and discuss patients’ conditions.
• **Role plays**
The majority, namely 270 (74%) out of 365 respondents, felt that role-plays are “seldom to never” used during clinical area placements. However, 95 (26.0%) respondents felt that role-plays are “often to always” used during clinical area placements.

• **Care plan presentations**
The majority, namely 251 (65.9%) out of 381 respondents, felt that care plan presentations are “seldom to never” done. However, 130 (34.1%) of the respondents felt that care plan presentations are “often to always” done.

• **Ward rounds**
The majority, namely 256 (65.8%) out of 389 respondents, felt that ward rounds were “often to always” carried out. However, 133 (34.2%) of the respondents felt that ward rounds were “seldom to never” carried out. The comment pertaining to ward rounds given by 2 respondents was that they are carried out in third year in preparation for the ward management assessment. The respondents felt that all levels of student nurses should be given the opportunity to be present at ward rounds.

• **Case studies**
A higher percentage, namely 293 (77.5%) out of 378 respondents, felt that case studies are “seldom to never” used during clinical area placements. However, 85 (22.5%) respondents felt that case studies are
are a good way of linking theory and practice, they should be used more frequently during clinical area placements.

**Tutorials led by nurse teachers**

The majority, namely 302 (81.8%) out of 369 respondents, felt that tutorials led by tutors are “seldom to never” held during clinical area placements. However, 67 (18.2%) respondents felt that tutorials led by tutors are “often to always” held. This finding suggests that nurse teachers are not much involved in the teaching of student nurses in the clinical areas – a fact that has been noted by Fretwell (1982), Alexander (1983:149-208) and Clinton (1985).

**Item 12: The extent to which student nurses were assisted to learn by specific categories of staff**

This item aimed to find out from the respondents the extent to which specified categories of staff assisted them to learn during clinical area placements. A four-point scale of “always”, “often”, “seldom”, and “never” was used in the assessment. The rating scale was collapsed into a two-point scale by linking the two points “often” and “always” into one, and the two points of “seldom” and “never” into one. The responses are displayed in figure 6.14.
Figure 6.14 shows that student nurses were most frequently assisted to learn by the following groups (these are expressed in order of frequency): by the same level of student nurses 335 (82.9%), by senior student nurses 330 (81.9%), by junior sisters 284 (70%), by clinical instructors 282 (70%), by sisters in charge 283 (69.7%), and by senior sisters 264 (65.2%). The student nurses felt that they were less assisted by nurse teachers (135: 34.6%) and doctors (133: 33.5%).
• Nurse teacher
The majority, namely 255 (65.4%) out of 390 respondents, felt that they were “seldom to never” assisted to learn by nurse teachers. Only 135 (34.6%) of the respondents felt that they were assisted by nurse teachers. This finding suggests that nurse teachers are not involved much in the clinical education of student nurses.

• Clinical instructor
A high percentage, namely 282 (70%) out of 403 respondents, felt that they were “often to always” assisted to learn by clinical instructors. Only 121 (30%) respondents felt that they were “seldom to never” assisted to learn by clinical instructors. This finding is expected because clinical instructors are employed to teach in the clinical areas and they are based there.

• Sister in charge
The majority, namely 283 (69.7%) out of 406 respondents, felt that they are “often to always” assisted to learn by sisters in charge. However, 123 (30.3%) respondents felt that they were “seldom to never” assisted to learn by sisters in charge. This finding suggests that sisters in charge are very much involved in student teaching. This finding confirms Bendall’s (1975) research, which found that most of the teaching of student nurses was performed by ward sisters.

• Senior sister
The majority, namely 264 (65.2%) out of 405 respondents, felt that they were “often to always” assisted to learn by senior sisters. Only 141 (34.8%) of the respondents felt that they were “seldom to never”
finding suggests that senior sisters play an important role in the clinical education of student nurses.

• **Junior sister**
The majority, namely 284 (70%) out of 406 respondents, felt that they were “often to always” assisted to learn by junior sisters. Only 122 (30%) felt that they were “seldom to never” assisted to learn by junior sisters. This finding suggests that student nurses are mostly assisted by junior sisters to learn during clinical area placements (when one compares junior sisters to other grades of ward professional nurses).

• **Doctor**
The majority, namely 265 (66.6%) out of 398 respondents, felt that doctors “seldom to never” assist student nurses to learn. Only 133 (33.5%) felt that they were “often to always” assisted to learn by doctors during clinical area placements. This finding suggests that doctors play some role in the education of student nurses during clinical area placements, although the extent of their involvement is low.

• **Senior student nurse**
A very high percentage, 330 (81.9%) out of 403 respondents felt that they were “often to always” assisted to learn by senior student nurses during clinical area placements. Only 73 (18.1%) of the respondents felt that they were “seldom to never” assisted to learn by senior student nurses. This finding suggests that senior student nurses play a very important role in assisting junior student nurses to learn. This implies that there is a need for nurse teachers to prepare senior student nurses for this very important teaching role.
that there is a need for nurse teachers to prepare senior student nurses for this very important teaching role.

- **Same-level student nurse**

A very high percentage, namely 335 (82.9%) out of 404 respondents, felt that they were “often to always” assisted to learn by “same-level student nurses”. Only 69 (17.1%) of the respondents felt that they were “seldom to never” assisted to learn by the same level of student nurses during clinical area placements. This finding suggests that peer education plays a very important role in the clinical education of student nurses.

**Item 13: How their last study block prepared student nurses for their responsibilities in the clinical area placement to which they were subsequently allocated**

The aim of this item was to find out from the respondents whether the study block they last attended prepared them for the responsibilities they were given in the clinical area placement to which they were allocated after that particular study block. The responses are presented in table 6.5.

**Table 6.5: Student nurses’ responses about whether their last study block prepared them for their clinical responsibilities in the clinical area to which they were subsequently allocated (n=390)**

<table>
<thead>
<tr>
<th>YES</th>
<th>No</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>323</td>
<td>82.8</td>
<td>67</td>
</tr>
</tbody>
</table>
The majority, namely 323 (82.8%) out of 390 respondents, believed that their last study block prepared them for their responsibilities in the clinical placements to which they were subsequently allocated. Only 67 (17.2%) respondents felt that the study block did not prepare them.

The 323 (82.8%) out of 390 respondents who felt that the last study block they attended had prepared them for the responsibilities they were given in the clinical areas to which they were subsequently allocated, gave the following responses about how they were prepared. The responses have all been grouped into following one category:

- All the 323 (100%) respondents felt that they were taught the knowledge and skills they needed to cope with their responsibilities in the clinical areas to which they were subsequently allocated. This finding may imply that student nurses will have been allocated to at least one clinical area for which the content they studied before allocation was relevant.

The 67 (17.2%) of the 390 respondents who disagreed that the last study block they attended prepared them for their clinical responsibilities were asked to give their reasons for their perceptions. The responses were categorized and are presented in figure 6.15. The responses do not add up to 100% because some respondents did not give responses.
Figure 6.15 Percentage distribution of student nurses' responses with regard to the reasons why the preceding block did not prepare them for clinical responsibilities (n=67)

Figure 6.15 shows that the respondents gave several reasons. It should be noted that the responses, which were given, are the same as those that were given and discussed under negative aspects of clinical area placements in Item 9:

- Allocation/placements to clinical areas were not done according to content covered in the block that was last attended (33 respondents (49.3%) out of 67 respondents).
- There was a lack of student supervision by nurse teachers in the clinical areas (10 respondents: 14.9%).
- Not enough time was available to master and retain study block content, and the time allocated for nursing demonstrations was inadequate (9 respondents: 13.4%)
- There was a theory-practice gap because what was taught in class is different from what is encountered in ward practice (6 respondents: 9.0%).
- Limited opportunities were provided for student nurses to practise procedures and prepare themselves for assessments because they were used to do all kinds of trivial jobs such as running errands (4 respondents: 6.0%).

**Item 14a: Learning atmosphere during study blocks**

This item aimed to find out how respondents perceived the atmosphere during study blocks and whether such an atmosphere promoted their learning or not. The findings are presented in Table 6.6.

**Table 6.6: Student nurses’ responses with regard to whether the atmosphere during study blocks promoted their learning**

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th></th>
<th>NO</th>
<th></th>
<th>TOTAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>192</td>
<td>48.5</td>
<td>F</td>
<td>204</td>
<td>51.5</td>
<td>396</td>
</tr>
</tbody>
</table>

The majority, 204 (51.5%) out of 396 respondents, felt that the atmosphere that prevailed in study blocks did not promote their learning. But 192 (48.5%) respondents felt that the atmosphere during study blocks in fact promoted their learning.
The 192 respondents (out of the total of 396) who felt that the atmosphere during study blocks promoted their learning were asked to explain how it promoted their learning. Their responses are presented in figure 6.16. The responses add up to more than 100% because some respondents gave more than one response.

Figure 6.16: Student nurses responses about how the atmosphere during study blocks promoted their learning (n=192)

Figure 6.16 shows that the respondents gave several explanations about how the atmosphere prevailing during study blocks promoted their learning. It should be noted that these responses are similar to those that
were given in Item 8 under positive aspects of study blocks. They are
categorised as follows:

- Study blocks allow students to participate actively in learning by
  engaging in, for example, group discussions, homework and
demonstrations (69 respondents: 35.9%).
- Nurse teachers are available and willing to facilitate student learning
  by teaching and answering students’ questions (50 respondents:
  26%).
- The physical environment in the school of nursing is conducive to
  learning because it is quiet and the classrooms are clean and
  comfortable because they contain heaters and fans and the furniture
  is well spaced (29 respondents: 15%).
- The social environment in study blocks is conducive to learning
  because facilitators are relaxed and friendly towards student nurses
  and student nurses consequently feel free to express their opinions
  without fear (29 respondents: 15%).
- There was enough time to learn and students were able to
  concentrate on their learning (25 respondents: 13%).
- Learning resources such as, for example, the library and teaching
  aids, are available and accessible to student nurses during study
  blocks (22 respondents: 11.5%).

The other reason that was given was the following:
- Students were relaxed during study blocks because they had straight
  off duties and had weekends off (5 respondents: 2.6%).

The 204 out of the 396 respondents who felt that the prevailing
atmosphere during study blocks did not promote their learning were
asked to provide reasons for their perceptions. Their responses are
presented in figure 6.17. The responses add up to more than 100% because some respondents gave more than one response.

Figure 6.17: Student nurses' responses about how the atmosphere during study blocks did not promote their learning (n=204)

Figure 6.17 shows that respondents gave several explanations as to why the atmosphere did not promote their learning during study blocks. Most of the following responses were also mentioned and discussed under negative aspects of study blocks in Item 9.

- Because too much content had to be covered during study block periods, nurse teachers had to rush through their presentations with the result that they did not have much time for explanations or amplifications. In addition, the pressure on student nurses to master
theoretical work was very great indeed. In addition, student nurses found it difficult to concentrate because their lessons were too long and the content of lessons was not stimulating (120 out of 204 respondents: 58.8%)

- Because resources and facilities, such as books, teaching equipment and classrooms, were inadequate, nurse teachers were forced to engage in an excessive amount of improvisation. In addition, classes were overcrowded (75 respondents: 36.8%).

- The learning environment was regarded as unconducive to learning because some tutors manifest harsh and rude behaviour to students, and are apparently quite prepared to reprimand and humiliate student nurses in front of their fellow students (60 respondents: 29.4%)

- Inadequate study periods/study time for individual study or revision was given as lessons extended until examinations (33 respondents: 16.2.

- Too much homework/group work was assigned to student nurses (14 respondents: 6.9%)

Respondents also gave the following reasons:

- Student nurses suffer due to the inability of some nurse teachers to teach properly. Thus, some teachers are not able to share their knowledge and one subject may be taught by too many teachers (7 respondents: 3.4%).

- Some student nurses simply cannot see demonstrations because groups are so large (5 respondents: 2.5%).

- There are too few demonstrations and there is no time for proper demonstrations in the wards (3 respondents: 1.5%).
• There is existence of a theory-practice gap, because what student nurses are taught is different from what happens in the wards (3 respondents: 1.5%).

Item 14b: The learning atmosphere in clinical area placements

This item aimed to find out from the respondents whether the atmosphere in clinical area placements promoted their learning. The responses are presented in table 6.7.

Table 6.7: Student nurses’ responses with regard to whether the atmosphere during clinical area placements promoted their learning

<table>
<thead>
<tr>
<th>YES</th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>159</td>
<td>42.6</td>
<td>214</td>
<td>57.4</td>
</tr>
</tbody>
</table>

Table 6.7 shows that the majority of respondents (214 or 57.4% out of 373), felt that the atmosphere during clinical area placements did not promote their learning. But 159 (42.6%) respondents felt that it did promote their learning. This finding suggests that the atmosphere in the clinical areas is unconducive to learning for student nurses. The implication of this is that clinical supervisors should create climates, which are conducive to learning for their student nurses. Elizubeir and Sherman (1995:108) emphasise that the ward sister has to create a non-threatening atmosphere that is conducive to student learning if she/he is to fulfil her/his educational role.

The 159 respondents (out of the total 373) who felt that the atmosphere during clinical area placements promoted their learning were asked to
explain how it promoted their learning. The responses are presented in Figure 6.18. The responses add up to more than 100% because some respondents gave more than one response.

Figure 6.18: Student nurses’ perceptions of how the atmosphere during clinical area placements promoted their learning (n=159)

Figure 6.18 shows that the 159 out of 373 respondents who felt that the atmosphere during clinical area placements promoted their learning gave several explanations as to how the atmosphere promoted their learning during clinical placements. These reasons are categorised below. (It should be noted that the following responses are also mentioned under positive aspects of clinical placements in Item 8.)
It gave them an opportunity to learn and experience the reality of nursing by seeing conditions and actually performing the work they had learnt about in theory (97 out of 159 respondents: 61.0%).

Learning could take place because a space was created in which sisters, doctors and senior student nurses could assist, support and answer the questions which junior student nurses asked (73 respondents: 45.9%).

Clinical instructors engaged in clinical teaching and supervised procedures in preparation for assessments (24 respondents: 15.1%).

The social atmosphere during clinical placements is conducive to learning because it is friendly and clinical instructors correct student nurses in a polite manner and do not embarrass them in front of patients (9 respondents: 5.7%).

The other reason given was as follows:

There is enough time to learn during clinical placements because there is less pressure on student nurses then than there is during study blocks (30 respondents: 18.8%).

This finding suggests that some student nurses are motivated and that they continue to learn during clinical placements.

The 214 (out of 373 respondents) who felt that the atmosphere during clinical area placements did not promote their learning were asked to give reasons for their perceptions. Their responses are presented in Figure 6.19. The responses add up to more than 100% because some respondents gave more than one response.
Overworking of students
Inadequate teaching
Inappropriate duty allocation
Poor relationships
Allocation not based on content covered
Excessive night duty
Lack of teaching by tutors
Overcrowding

Figure 6.19: Student nurses' perceptions of how the atmosphere during clinical area placements did not promote their learning (n=214)

Figure 6.19 shows that 214 (57.4%) of the 373 respondents who felt that the atmosphere during clinical area placements did not promote their learning gave the following explanations as to why the atmosphere did not promote their learning. These explanations are categorised below. (Note that some of these reasons are similar to those that were indicated under negative aspects of clinical area placements in Item 9.)

- Because student nurses were overworked as a result of staff shortages, which made wards far busier than they would be under normal conditions, they generally felt too tired to study after work (169 out of 214 respondents: 79.0%).
• Student nurses were inadequately taught during clinical area placements because the sisters were always too busy (72 respondents: 33.6%).

• Duty allocations were inimical to the practice and learning of new skills. Thus, for example, student nurses had to perform nurse aid duties and too many non-nursing errands (43 respondents: 20.1%).

• A bad relationship existed between qualified clinical staff and student nurses because the former refuse to supervise pre-assessment procedures. This bad relationship is exasperated because some clinical staff are autocratic and show their disrespect for student nurses by shouting at their students in front of patients (40 respondents: 18.7%).

• Student nurses are not allocated to clinical areas in terms of the content, which they have most recently covered in study blocks (11 respondents: 5.1%).

• Because student nurses have to do an excessive number of night duties, they are too tired to study after night duties and (in addition) they miss out on a lot that happens in the wards when they go away on nights off (9 respondents: 4.2%).

• There was lack of clinical teaching on the part of nurse teachers (3.7%).

• Overcrowding in the wards/clinical areas makes learning difficult because student nurses may make mistakes (5 respondents: 2.3%). This finding suggests that it is difficult for student nurses to be taught or learn in overcrowded wards. Student nurses may also be anxious because they may fear contracting infectious diseases such as tuberculosis.
Item 15a: The linking of theory and practice during study blocks

The aim of this item was to find out from the respondents whether they were assisted to link theory and practice during study blocks. The responses are presented in Table 6.8.

Table 6.8: Student nurses’ responses with regard to whether they were assisted to link theory and practice during study blocks

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>352</td>
<td>90.7</td>
<td>36</td>
</tr>
</tbody>
</table>

The majority of respondents, namely 352 (90.7%) out of 388, respondents felt that student nurses were assisted to link theory and practice during study blocks. But 36 (9.3%) respondents felt that they were not assisted to link theory and practice during study blocks. The process of linking theory to practice is facilitated by the provision of relevant clinical examples, demonstrations, visits to clinical areas and the use of student-centred teaching methods. These activities may not have been appreciated by the remaining student nurse respondents (36 respondents: 9.3%) or perhaps their nurse teachers did not apply them in the way that helped the student nurses to integrate theory with practice.

The 352 out of the 388 respondents who felt that they were assisted to link theory and practice indicated how this was done, and the 36 remaining respondents who felt that they were not assisted, gave suggestions about what they would want to be done so that they could be helped to integrate theory with practice. The responses were categorized and are presented in figures 6.20 and figure 6.21
respectively. The responses add up to more than 100% for those who gave positive answers because some of these respondents gave more than one answer, and to less than 100% for suggestions as to how theory might be integrated with practice because not all of the remaining respondents provided suggestions.

Figure 6.20: Responses given by student nurses to explain how they perceived theory and practice to be linked during study blocks (N=352)

Figure 6.20 shows the activities that respondents believed assisted them to link theory and practice.

- Doing practical procedures such as demonstrations and return demonstrations (239 out of 352 respondents: 67.9%).
- Organized group visits to the wards/clinical areas to see patients with conditions that had been described in class (127 respondents: 36.1%).
- Clinical examples (such as case presentations and case studies) that had been described by nurse teachers during lessons (56 respondents: 15.9%).
- Conditions and examples that are described in class are commonly encountered in the wards (9 respondents: 2.6%).

The 36 (9.3%) out of the 388 respondents who felt that they were not assisted to link theory and practice during study blocks gave suggestions about what they would want to be done so that they could be helped to integrate theory with practice. These suggestions were categorized and are presented in figure 6.21.
Visits to clinical areas to come immediately after theory

Practical procedures taught as practised

Improvement of communication between nurse teachers and clinical staff

Conditions and examples in wards

Figure 6.21: Student nurses’ suggestions as to what should be done to assist them to link theory and practice during study blocks (n=36)

- Visits to clinical areas should be carried out immediately after student nurses have covered a particular section of theory, and demonstrations that are relevant to specific theory should be carried out at the same time that the theory itself is being taught (15 out of 36 respondents: 41.7%).

- Practical procedures should be taught in exactly the same way that they are being practised in the wards because there is shortage of equipment in the wards and staff were forced to improvise without proper equipment, support, etc. (5 respondents: 13.9%). This finding suggests that classroom teaching is based on the ideal and not on the reality that student nurses encounter in the wards. Because of this,
student nurses should be informed about the realities that are encountered in clinical areas.

- More time should be set aside to teach practical nursing so that all student nurses will have opportunities to perform return demonstrations in the classroom situation (5 respondents: 13.9%). This finding suggests that more emphasis and time is given to theory than to practical nursing.

- Communication between the school and clinical area staff should be improved so that nurse teachers can be made aware of what is happening in the wards (1 respondent: 2.7%).

**Item 15b: Linking theory and practice during clinical area placements**

The aim of this item was to find out from the respondents whether they were assisted to link theory and practice during clinical area placements. The responses are presented in Table 6.9.

**Table 6.9: Student nurses’ responses about whether they were assisted to link theory and practice during clinical area placements**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>281</td>
<td>76.8</td>
<td>85</td>
</tr>
</tbody>
</table>

The majority of respondents, namely 281 (76.8%) out of 366, felt that they were assisted to link theory and practice. However, 85 (23.2%) respondents felt that they were not assisted to link theory and practice. This finding suggests that student nurses are helped on the whole to integrate theory with practice during clinical area placements.
The 281 (76.8%) out of 366 respondents who felt that they were assisted to link theory and practice during clinical area placements gave their reasons as to why they felt this was being done. These reasons are presented in figure 6.22. The responses add up to more than 100% because some respondents gave more than one response.

Figure 6.22: Student nurses responses about how they are assisted to link theory and practice (n=281)

Figure 6.22 shows that respondents indicated that theory was linked to practice by means of the following activities. These responses were grouped into the following categories:
• Allocation to clinical areas helps student nurses to link theory and practice because the conditions that are covered in class are encountered in real-life situations and procedures are performed (122 out of 281 respondents: 43.4%).

• Pre-assessment follow-up procedures show student nurses how to link theory and practice (74 respondents: 26.3%).

• Student nurses are shown how to integrate theory with practice during the bedside teaching that clinical instructors and ward sisters undertake and during the teaching that takes place on doctors' rounds (72 respondents: 25.6%).

• Certain ward activities, such as discussions, patient presentations, homework and case studies, which the sister in charge performs, assist student nurses to link theory and practice (51 respondents: 18.1%).

• When student nurses are allocated duties with senior student nurses, qualified staff and doctors, they receive opportunities to integrate theory with practice (28 respondents: 7.5%). This finding suggests that if student nurses are allowed to accompany and assist qualified staff, doctors and senior student nurses during procedures, they will be given opportunities to learn by observing and by asking pertinent questions.

The 85 (23.2%) out of 366 respondents who felt that they were not assisted to link theory and practice during clinical area placements indicated what they would like to be done so that this could happen. Their suggestions were categorized and are presented in figure 6.23. The responses add up to more than 100% because some respondents gave more than one response.
Clinical teaching by tutors
Sisters to make time to teach
Improvement of resources
Allocation of time for learning
Appropriate duty allocation
Sisters to create a conducive learning environment
Placements based on content
Inservice training for supervisors

Figure 6.23: Student nurses’ responses about what should be done to assist student nurses to link theory and practice during clinical placements (n=85)

Figure 6.23 shows that respondents made several suggestions, and these were categorized. (Note that some of these suggestions were similar to those, which were made for improving clinical area placements in Item 17.)
• Nurse teachers and clinical instructors needed to perform bedside/clinical teaching more (22% out of 85 respondents: 25.9%).

• Even though they are always extremely busy, ward sisters should make time to teach student nurses (19 respondents: 22.3%).

• There is an urgent need for proper resources. Proper resources would obviate the need for improvisation and enable procedures to be performed correctly (i.e. as they are taught in the classroom) (17 respondents: 20%).

• Time should be allocated for learning. The kind of time envisaged was time for discussions (for example) during ward rounds with a tutor or clinical instructor during clinical area placements (17 respondents: 20%).

• Duty allocation should enhance the integration of theory with practice. If duties are allocated with student nurses' needs in mind, they will be given opportunities to perform the procedures they have learnt about in school. Student nurses should also be asked to accompany and assist doctors on their rounds (11 respondents: 12.9%).

• Sisters should create an environment that is conducive to student learning by being approachable, by correcting mistakes in a respectful manner and by not deliberately looking for mistakes (8 respondents: 9.4%). This finding shows that student nurses want to be treated with respect because they are adult learners.

• Clinical placements should be made congruent with the content that student nurses have most recently covered in study blocks (7 respondents: 8.2%).

• Regular in-service training courses are needed to update ward sisters on procedures and the art of teaching (5 respondents: 5.9%). This
finding suggests that the knowledge and skills of some professional nurses may not be up to standard.

**Item 16: Provisions for individual study during clinical area placements**

This item aimed to find out from respondents whether any provisions were made for them to do individual study during their clinical area placements. The responses are presented in Table 6.10.

Table 6.10: Student nurses’ responses about whether provisions were made for them to do individual study during clinical area placements

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>112</td>
<td>30.2</td>
<td>259</td>
</tr>
</tbody>
</table>

The majority 259 (69.8%) of the 371 respondents felt that there are no provisions made for student nurses to do individual study during their clinical area placements. In contrast, 112 (30.2%) respondents felt that provisions were made for them to do individual study.

The provisions which the 112 respondents (30.2%) felt were made for them to do individual study were categorized. The findings are presented in figure 6.24. The responses add up to more than 100% because the respondents gave more than one response.
Figure 6.24: Percentage distribution of the responses of student nurses who felt that provisions were made for them to do individual study during clinical placements (n=112)

Figure 6.24 shows that respondents cited the following provisions:

- Individual teaching is undertaken in clinical areas. Such individual teaching includes, for example, case presentations to the sister in charge, homework on topics not yet covered and individual teaching undertaken during post rounds reports (60 out of 112 respondents: 53.6%).

- Student nurses practise procedures before assessments by doing supervised pre-assessment follow-ups (20 respondents: 17.9%)
- Student nurses write case studies on particular conditions that they encounter among patients whom they nurse (12 respondents: 10.7%).
- Learning materials such as charts, pamphlets and books are made available to student nurses (11 respondents: 9.8%).
- Student nurses study during their off duties (9 respondents: 8.0%).
- Facilities for study such as the library in the nursing school and study classrooms in the nurse’s homes are made available to student nurses (4 respondents: 3.6%).

The 258 (69.5%) respondents out of a total of 371, who felt that no provisions were made for them to do individual study described the provisions that they felt were lacking. A summary of what they perceived to be lacking is presented in figure 6.25. The responses add up to more than 100% as some respondents gave more than one response.
Figure 6.25: Percentage distribution of student nurses’ responses with regard to the provisions for individual study which they perceived to be absent from clinical placements (n=258)

Figure 6.25 shows that the respondents gave several responses, and these were categorized as follows:

- No time is provided for individual study during clinical area placements (231 out of 258 respondents: 89.5%).
- Trained staff have no interest in seeing student nurses learn in the clinical areas (29 respondents: 11.2%).
• Because student nurses' off duties are made to cover wards, they are too tired to study when they are off duty (22 respondents: 8.5%).
• No assignments or activities to encourage student nurses to learn were given to them during their clinical area placements (15 respondents: 5.8%).
• The environment in the wards was not conducive to individual study because of the poor relationship between student nurses and sisters and because wards were always extremely busy (7 respondents: 2.7%).
• There was no study time or library time because the library opened when student nurses went on duty and closed when they went off duty (6 respondents: 2.3%).
• There were no reference materials and books in the clinical areas/wards (4 respondents: 1.6%).

**Item 17: Suggestions about how to improve the block system**

The purpose of this item was to give respondents the opportunity to make suggestions about how study and clinical area placements could be improved in a way that would enhance teaching and learning. The responses are shown in figure 6.26 and figure 6.27.
Figure 6.26: Student nurses’ responses containing suggestions about how to improve the teaching and learning of student nurses during study blocks (N=415)

Figure 6.26 shows that the respondents made several suggestions. The responses add up to more than 100% because some of the respondents gave more than one response. These were grouped into the following categories.
The amount of block content should correspond to the block period.
The amount of block content should be reorganised so that it can be
covered in the amount of time that is allocated to the block period. This
was mentioned by 229 (55.2%) out of 415 respondents. This was
contained in responses such as:
• Block time to be increased in order to cover all the content.
• Decrease the number of subjects in the block.

The library should be well equipped.
This was indicated by 62 (14.9%) respondents and was revealed by
comments such as:
• Library to be well equipped with relevant current books.
• Number of books to be adequate for number of the students.

Provision of study periods on timetables.
This was indicated by 53 (12.8%) respondents and was contained in
responses such as:
• Study periods to be provided – especially before examinations.
• Two or three study periods per week.

Provision of adequate facilitators, teaching and physical resources.
This was indicated by 50 (12.0%) respondents and was suggested by
responses such as:
• Adequate provision of teaching aids and facilitators.
• Need for well-lighted and air-conditioned large classrooms for large
  intakes.
Use of student-centred teaching methods.
This was mentioned by 48 (11.6%) respondents and was suggested by responses such as:

- Use of student participatory teaching methods.
- Use of teaching aids such as videos and demonstrations.
- More time to be allocated for demonstrations.

Good relationships between students and facilitators.
This was mentioned by 39 (9.4%) respondents and was revealed by responses such as:

- Improve facilitator-student relationships.
- Tutors must be friendly.
- View and respect students as adults.
- Do not intimidate but motivate students.

Improve teaching and learning activities.
This was mentioned by 25 (6.0%) respondents and was revealed by responses such as:

- Students to go to wards more often for demonstrations.
- Teaching to be based on current ward practices.
- Tutors to clarify assignments for group work.
- Small groups advisable to encourage all students to actively participate.

Regular tests and homework.
This was mentioned by 16 (3.9%) respondents and was clear from responses such as:

- Students to have weekly tests for revision.
• Class revisions before end of block examinations.
• Regular tests to motivate learning.
• Post test feedback is necessary.
• Homework
Figure 6.27: Student nurses' responses containing suggestions to improve teaching and learning during clinical placements (n=415)

Figure 6.27 shows that respondents made several suggestions to improve the teaching and learning of student nurses during clinical area placements. The responses add up to more than 100% because some respondents gave more than one response. These were grouped into the following categories:
Clinical teaching must be planned and regular.

This was mentioned by 188 (45.3%) respondents and was clear from responses such as:

- There must be set time for bedside teaching and tutorials every day.
- Report time must include teaching.
- Clinical instructors should carry out regular bedside teaching of each student and not only for assessments.
- The number of bedside teaching sessions per placement should be stipulated. [This finding suggests that clinical teaching by clinical instructors is inadequate and unsystematic.]
- Bedside teaching should be done on patients' conditions, which have not yet been covered in study blocks, procedures not yet done and when students change wards. [This finding suggests that student nurses require support at these times. This is similar to what was reported by Policiniski and Davidhizar (1985:34), namely that student nurses experience greater levels of stress during the initial clinical experience and every time they are allocated to a new clinical area.]

Nurse teachers should communicate with ward/clinical supervisors about the content covered in study block.

This was indicated by 145 (34.9%) of the 415 respondents and was revealed by comments such as:

- Ward sisters to be encouraged to teach students.
- Clinical supervisors to be informed of content covered by students allocated to their areas. This prevents students being asked to do untaught procedures.
Nurse teachers should participate in teaching students in the clinical areas.
This was mentioned by 107 (25.8%) respondents and was revealed by responses such as:
• Nurse teachers should carry out bedside teaching in the wards.
• Tutors should follow up students.

Provision of adequate staff and resources in the clinical areas
This was mentioned by 83 (20%) respondents. This was revealed by response such as:
• Adequate staff will reduce students overworking resulting in learning more.
• Senior sisters should not be too busy to teach.
• Adequate resources to discourage improvisation
• Encourage good nursing habits
• Adequate qualified staff should be employed so that students do not cover staff shortage in order for them to do work which is related to their learning

Ward sisters should create an environment that is conducive to learning.
This was suggested by 82 (19.7%) respondents and was revealed by responses such as:
• Sisters should facilitate students to learn
• Sisters should create a conducive environment for students to learn
• Ward sisters should make time to teach students [93 responses, i.e. 22.4%]
• Time should be allocated for learning [83 responses, i.e. 20.0%], for example, discussions, ward rounds with tutor or clinical instructor
• Sisters should be approachable
• Sisters should correct mistakes in a respectful manner and not looking for mistakes

Appropriate duty allocation
This was mentioned by 81 (19.5%) respondents and was revealed by responses such as:
• Duty allocation according to student learning needs.
• Students should be allocated duties to do procedures covered at school and to do doctors’ rounds
• All level of students to do doctors’ rounds.
• Less night duties.
• No split duties.

Assignments or tests during clinical area placements
This was mentioned by 72 (17.3%) respondents and was revealed by responses such as:
• Students should be given homeworks, which are marked.
• Students should be given homework on patients in the wards for presentation or discussions when the ward is not busy
• Should write case studies in every ward.
• Students should be given tests during clinical area placements to encourage them to study – especially when not due for assessments.
Placements should be based on content covered.
This was indicated by 43 (10.4%) respondents and was revealed by responses such as:
• Placement of students to follow the content covered.
• Placements should be according to the learning needs of students.

A liaison person for student nurses should be appointed in each ward.
This was mentioned by 36 (8.6%) of the respondents. This was revealed by responses such as:
• There should be a senior sister responsible for student affairs in each ward.
• There should be a qualified nurse in each ward responsible for teaching students

There is a need for regular in-service education for qualified staff.
This was mentioned by 25 (6%) respondents and was revealed by responses such as:
• Improve methods and techniques for assessments.
• There should be a uniform way of teaching demonstrations.
• Clinical instructors, sisters and tutors should be competent and friendly.
• Need for regular in-service courses to update sisters on procedures and art of teaching

Supernumerary status of students.
This was indicated by 14 (3.4%) respondents and was revealed by responses such as:
• Students to have supernumerary status.
• Go to wards only to carry out procedures and not to work.

6.3 Summary

The findings revealed that student nurses were adult learners and that they were predominantly female. The majority of respondents did not understand what the block system of nurse education meant. The positive aspects of study blocks, which were identified included: the availability of time for student learning, the use of action teaching/learning techniques, and the availability of nurse teachers. The positive aspects of clinical area placements included opportunities to integrate theory with practice and to learn through experience.

Several negative aspects of the block system were identified. These included too much content per block, and the lack of study periods during study blocks. While inadequate resources were also identified as a negative feature, this probably occurs in most systems of nurse education. The majority of respondents felt that study blocks were not well enough organized to enhance student nurses' learning. The atmosphere during study blocks and clinical area placements was found to be unconducive to student nurses' learning. The other negative aspects of clinical area placements included the overworking of student nurses, inappropriate clinical allocations and a shortage of qualified staff in the clinical areas.

The commonest method of teaching used during study blocks was the formal lecture and the ward round during clinical placements. During clinical placements, student nurses were most frequently assisted to
learn by (in order of frequency) same-level student nurses, senior student nurses and junior sisters. The majority of respondents felt that no provisions had been made to motivate student nurses to do individual study during clinical placements. This, however, may also occur in other systems of nurse education.

Several suggestions were made about how to improve the block system. Some of these were: a reduction of study block content, the provision of adequate resources and the allocation of study periods during study blocks. Student nurses also felt that nurse teachers should communicate with clinical supervisors so that they could establish the level of knowledge that student nurses had attained before they were placed in clinical settings. They also needed to communicate with each other about their objectives. There was an expressed need for planned clinical teaching during students' clinical area placements.

The data which was collected from nurse teachers will be presented and analysed in the next chapter.
CHAPTER 7

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS FROM NURSE TEACHERS

7.1 INTRODUCTION

The data, which was obtained from the nurse teachers, who teach student nurses in the general nurse diploma programme, is presented in this chapter. The sample consisted of 40 nurse teachers who were working in the four central hospitals, which train general nurses in Zimbabwe.

The purpose of this chapter is to present a profile of the nurse teachers and to describe their perceptions of various aspects of the block system. Because the nurse teachers are responsible for the planning and implementation of the general nurse diploma programme block system, they have definite views and opinions about the block system as they have experienced it.

The aim of the questionnaire items was to elicit the perceptions of the nurse teachers with regard to the block system. The first section of the questionnaire, namely items 1 to 5, elicited the biographical data of the nurse teachers. These items required the respondents to circle the answer, which was applicable to them. Items 6 to 16 aimed to elicit the perceptions of the nurse teachers with regard to the block system. Items 9, 12, 13 and 14 asked respondents to select a positive (yes) or negative (no) response to the block system and then elaborate on their choice by providing reasons, explanations and amplification.
Items 10, 11 and 15 asked respondents to rate aspects of the block system on a given rating scale. Items 6, 7, 8 and 16 were open-ended questions, which elicited the views or opinions of nurse teachers about the block system.

Descriptive statistics were used to analyse the data. The data from open-ended questions was analysed by content analysis of the responses and data with similar themes were grouped into categories.

The data is presented, analysed and interpreted item by item. The data is summarised in figures and frequency tables.

7.2 SECTION A: BIOGRAPHICAL INFORMATION

The biographical information was sought to provide the researcher with a profile of the respondents because items in the profiles might have a bearing on the findings of the study.

Item 1: Gender
This item looked at the gender of the respondents. The findings are presented in Figure 7.1.
Figure 7.1: Percentage distribution of nurse teachers by gender (n=40)

Figure 7.1 shows that the majority 39(97.5%) of the respondents were female. Only 1(2.5%) respondent was male. This is an expected finding because the majority of professional nurses in the training institutions are women because – from historical point of view – nursing as a profession has always been dominated by females.

Item 2: Age

This item elicited the age of the respondents. The findings are presented in Figure 7.2. The ages were grouped into three groups defined by ten year intervals.
Figure 7.2: Percentage distribution of nurse teachers by age (n=40)

Figure 7.2 shows that the majority, 23 (57.5%), of 40 respondents were between 40 and 49 years old. Fifteen (37.5%) respondents were between 30 and 39 years old. Only 2 (5%) respondents were over 50 years. There were no nurse teachers who were younger than 30 years old. This may be due to the fact that considerable experience in professional nursing is a prerequisite for training as a nurse teacher in Zimbabwe. It should be noted that the responses of the nurse teachers (which we shall examine in detail in this chapter) might be influenced by their considerable experience as ward sisters.
**Item 3: Place of work**

The aim of this item was to find out the respondents' places of work. The findings are presented in figure 7.3.

![Pie chart showing percentage distribution of nurse teachers by place of work](image)

**Figure 7.3: Percentage distribution of nurse teachers by place of work (n=40)**

Figure 7.3 shows that the majority, 13 (32.5%), of the 40 respondents were working at Parirenyatwa Hospital, that 13 (32.5%) respondents were working at Harare Hospital. Eight (20%) and 6 (15%) respondents were working at United Bulawayo and Mpilo Hospitals respectively. Harare and Parirenyatwa schools therefore have more nurse teachers. This is proportional to the size of the nursing schools in terms of the overall student nurse enrolment and nurse teacher establishment.
Item 4: Experience as a qualified nurse teacher

This item sought to find out how many years of teaching experience the nurse teachers in the sample had. The years were grouped into intervals of five years. The years of experience are presented in Figure 7.4.

![Graph showing years of experience as a nurse teacher](image)

**Figure 7.4: Years of experience as a nurse teacher (n=40)**

It is evident from Figure 7.4 that the majority, 17 (43%), out of 40 respondents had between 1 and 5 years experience. Nine (23%)
respondents had between 6 and 10 years experience. Six (15%) respondents had between 11 and 15 years experience, and 4 (10%) had between 16 and 20 years experience. Only 4 (10%) of the respondents had less than one year of experience. This shows that a considerable number of the sample, i.e. 19 (49.7%), had 6 or more years’ experience.

This finding shows that most of the nurse teachers were experienced nurse teachers. This fact may have influenced their perceptions of the block system because their views would inevitably be based (in most cases) on a great deal of experience.

**Item 5: Professional qualifications**

This item solicited information about the professional qualifications of the respondents. These findings are presented in Table 7.1.
Table 7.1: Distribution of nurse teachers by professional qualifications (N=40)

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered General Nurse</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>State Certified Midwife</td>
<td>30</td>
<td>75</td>
</tr>
<tr>
<td>Intensive Care Nursing Diploma</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Nurse Anaesthetist Diploma</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Operation Theatre Diploma</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Ophthalmic Nursing Diploma</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Psychiatric Nursing Diploma</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Community Health Nursing Diploma</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Diploma in Nursing Education</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td>Bachelor of Nursing Science/Nursing Education</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Bachelor of Education (Adult Education)</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Master of nursing Science</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Master of Education and Development of Health Promotion</td>
<td>1</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Table 7.1 shows that all 40 (100%) respondents possessed the General nurse Diploma and that a large majority of respondents (28:70%) possessed a Diploma in Nursing Education. Ten (25%) respondents had Bachelor of Nursing Science or Bachelor of Education Degree. This is an expected result because the minimum qualifications for a nurse teacher is a General Nurse Diploma and a Nursing Education Certificate. Apart from the above qualifications, some nurse teachers had extra qualifications – mostly in midwifery (30 out of 40 respondents:75.0%). It is important to note that most of the nurse teachers are specialists in other nursing disciplines – a factor that should play some role in enhancing their teaching skills and knowledge of nursing in these fields.
SECTION B: PERCEPTIONS OF NURSE TEACHERS WITH REGARD TO THE BLOCK SYSTEM

This section aimed to elicit from the respondents their views, opinions and perceptions about positive and negative aspects of the block system.

**Item 6: Meaning of the “block system”**

The aim of this item was to find out from the respondents the meaning of the term “block system”. The responses are shown in Figure 7.5.

![Pie chart showing understanding of the term “block system”](image)

**Figure 7.5: Nurse teachers’ responses with regard to their understanding of the term “block system” (n=40)**

Figure 7.5 shows that the majority (31 or 77.5%) out of 40 respondents clearly understood the meaning of the block system. In contrast, 9 (22.5%) respondents did not clearly understand the meaning of the block
system. This implies that most nurse teachers understand what the block system means.

**Item 7: Positive aspects of study blocks and clinical area placements**

The aim of this item was to find out which positive aspects of study blocks and clinical area placements enhance the teaching and learning of student nurses in the opinion of nurse teachers.

The responses regarding positive aspects of study blocks are presented in Figure 7.6. The responses add up to more than 100% because some respondents gave more than one response.
Figure 7.6: Nurse teachers’ responses with regard to the positive aspects of study blocks (n=40)

Figure 7.6 illustrates the following categories of positive aspects of study blocks that emerged from a content analysis of the respondents’ feedback.

**Availability of time to acquire knowledge and skills.** This was the perception of all the 40 (100%) respondents and was clear from phrases like:

- Large chunks of input are given.
• There is time to give student nurses theoretical input.
• Time is available to concentrate on learning
• Can study more than in clinical areas.

Integration of theory and practice. This was mentioned by 29 (72.5%) respondents and was revealed by responses such as:
• Students consolidate what they have learnt in the clinical area.
• Students have the opportunity to apply their knowledge to clinical practice.

Attendance of study blocks as a group. This was indicated by 25 (62.5%) respondents and was clear from responses such as:
• Attendance as a group
• Attendance as a group and students get similar information, can discuss as a group and learning can be divided according to the level of student nurses

Facilitation of student learning by nurse teachers. This was mentioned by 18 (45.0%) respondents and was indicated by responses such as:
• Tutors facilitate learning by guiding and role modelling
• Tutors assist individuals when asked and are available.
• Tutors give assignments.

A learning environment that is conducive to learning. This was indicated by 16 (40.0%) respondents and was revealed by phrases such as:
• Free from the stress in the wards, gives students a break from the overwhelming work in the clinical areas.
• Students can interact with tutors.
• Gives students more contact with tutors.
• Feel that they are students when they come to the school.

Availability of learning resources. This was mentioned by 7 (17.5%) respondents and was clear from responses such as:
• Gives tutors time to invite specialists
• Students can use the library
• Visit to certain areas can be arranged

These findings suggest that study blocks have many positive aspects, which promote the teaching and learning of student nurses.

The responses regarding positive aspects of clinical area placements are presented in Figure 7.7. The responses add up to more than 100% because some respondents gave more than one response.
Figure 7.7: Nurse teachers’ responses with regard to positive aspects of clinical area placements (n=40)

Figure 7.7 illustrates the categories, which emerged from the responses of nurse teachers with regard to the positive aspects of clinical area placements. These categories are listed below.

Integration of theory and practice. This was indicated by all 40 (100%) respondents and was revealed by responses such as:

- Deal with patients
- Experiential learning
- Assist students to understand disease conditions they meet
• Theory may be followed by practice.
• Enhances critical and analytical thinking
• Students are placed in areas in which they will have covered some theory

**Learning and practising of skills.** This was mentioned by all 40 (100%) respondents and was indicated by phrases like:

• Helps students to master skills which are functional in a nursing institution
• Grooms the student nurse into a mature trained nurse
• A direct supervision, more of apprenticeship
• Gain confidence

This finding suggests that student nurses learn many skills and that they become proficient as well as confident in their role as nurses.

**Development of good attitudes.** This was indicated by 25 (62.5%) respondents and was revealed by responses such as:

• Students develop good attitudes by mixing with other health workers
• Learn to work as teams

**Assessments are done.** This was mentioned by 15 (37.5%) of respondents.

• Assessments during clinical area placements are done according to the level of training

**Facilitation by clinical supervisors.** This was mentioned by 13 (32.5%) respondents and was clear from responses such as:

• Supervision by trained staff
• Support from sisters and clinical instructors
• Doctors willing to teach.

The above findings confirm how important it is for student nurses to apply the theory they have acquired in the classroom to real patients. This confirms what was reported by McCaugherty (1991), when he stated that no matter how comprehensive a textbook or lecture is, it can never adequately convey the unique social and psychological dimensions of each individual who is suffering from the same disease.

**Item 8: Negative aspects of the block system**

This item aimed to elicit the respondents' perceptions about the negative aspects of study blocks and clinical area placements, i.e. those aspects that hinder student nurse teaching and learning. The responses are presented in Figures 7.8 and Figure 7.9. The total responses add up to more than 100% because some respondents gave more than one answer.
The several disadvantages of study blocks that were perceived by respondents are illustrated in Figure 7.8. These are described in more detail below.
Too much content per block. This was mentioned by all 40 (100%) respondents and was clear from responses such as:

- Heavy learning load and too many subjects to be covered resulting in hurried lectures
- Lack of individual student feedback on assignments
- Learning important subjects at the end of the block
- Because of workload, student nurses cram in order to pass examinations.
- Students have more dependent learning than self-directed learning

Shortage of resources and physical facilities for teaching and learning. This was indicated by 38 (95%) respondents and was revealed by responses such as:

- Shortage of reference books, teaching aids, equipment and accessibility to the library is difficult.
- Lack of teaching models
- Classrooms are too small for the number of students
- No study rooms

Shortage of nurse teachers. This was indicated by 27 (67.5%) respondents. Statements such as the following highlighted this:

- Hardly any time for bedside teaching.
- No time for the individual student
- No time for research due to shortage of staff.

Lack of student motivation. This was mentioned by 21 (52.5%) respondents and was clear from responses such as:

- Some student nurses are not motivated to learn
- Motivation on the part of students
Lack of continuity in the teaching and learning process. This was mentioned by 13 (32.5%) respondents and was revealed by responses such as:

- Students fragment learning to different blocks
- There is no continuity to the learning process.

Students concentrate on theory learning only. This was mentioned by 13 (32.5%) respondents and was revealed by responses such as:

- Students are divorced from the clinical area.
- Sometimes students fail to visualise what is being taught
- Lacks immediate correlation of theory and practice.

Large groups. This was indicated by 12 (30%) respondents and was revealed by responses such as:

- We do not know the students
- Lack of individual tuition
- The student-tutor ratio is too high
- Unable to give individual attention to slow learners

Overworked nurse teachers. This was indicated by 10 (25.0%) respondents and was clear from responses such as:

- Overload of tutors reducing effective teaching
- Nurse teachers are overworked
- Fatigue at end of the block
- Work at home

Theory-practice gap. This was indicated by 6 (15%) respondents and was clear from responses such as:
• A division between what is taught and what is practised in the clinical area exists.
• What is taught is not practised due to shortage of equipment.

**End of block examinations come too soon in the study block.** This was mentioned by one (2.5%) respondent and was indicated by the responses:
• Examinations come too soon during study blocks
• It is very stressful to students towards examinations
  [This finding suggests that student nurses are not given a chance to master the content they are taught before their examinations arrive.]

The above findings suggest that study blocks have many disadvantages, which diminish the efficiency with which student nurses are taught and learn.
Several negative aspects of clinical area placements were mentioned by respondents and were grouped together into the categories illustrated in Figure 7.9. Explanations of these categories are provided below:

A shortage of qualified staff causes situations in which student nurses are inadequately supervised by all grades of supervisors.
during clinical are placements. This was highlighted by all 40 (100%) respondents in statements such as:

- Shortage of experienced ward staff
- Lack of supervisors and clinical instructors
- Inadequate teaching, support and supervision of students

Inadequate resources. This was indicated by 37 (92.5%) respondents and was clear from responses such as:

- Student nurses have to improvise equipment
- Lack of ward equipment resulting in too much improvisation
- Student nurses fail to implement what is taught in the study blocks
- Shortage of equipment may sometimes cause students to learn from ward staff unacceptable behaviours, which they find difficult to get rid of.

Overworking of student nurses. This was highlighted by 26 (65%) respondents and was revealed by responses such as:

- Student nurses are full time workers and do not have time to learn
- Excessive work which is task orientated
- Students man the wards
- Students learn short cuts in order to cope with the workload
- Students are used as manpower to cover staff shortage

Inappropriate clinical allocation after study blocks. This was highlighted by 15 (37.5%) and was revealed by responses such as:

- Not all student nurses are placed according to content covered
- Clinical allocation is not tailored to suit the level of training of each student.
The numbers are too large to actually allow student placement in appropriate areas.

Student nurses end up doing procedures they have not covered during study blocks.

**Poor communication between the school and clinical area staff.** This was highlighted by 7 (17.5%) respondents and was revealed by responses such as:

- There is conflict between what is taught and actual experience in the wards.
- Some qualified staff are unwilling to teach.
- Attitudes of senior staff affect training of student nurses.
- Sisters who use student nurses as pairs of hands and not learners.
- Sisters make student nurses do the bulk of the work.

**Inappropriate duties and off duties.** This was indicated by 6 (15.0%) respondents and was clear from responses such as:

- Students are made to do procedures they have not been prepared for.
- Students are given responsibilities prematurely and do some staff duties.
- The 12:30 – 16:00 hours off duty is too tiring.
- Student nurses do not like the afternoon off duty (12:30 – 16:00 hours).

**Lack of student motivation:** This was mentioned by 4 (10%) respondents and was revealed by responses such as:

- Students lack intrinsic motivation.
- Students have the wrong attitude.

This finding suggests that some student nurses lack the motivation to study/learn during clinical area placements. This is different from
Alexander's (1984:4) findings, which were that the motivation of student nurses to learn during clinical placements was high.

**Patient overcrowding and too many ill patients.** This was indicated by 4 (10.0%) respondents and was clear from responses such as:

- There are too many ill patients
- Wards or environments are not conducive to learning
- Overcrowding with some patients using floor beds.

**Item 9a: Organisation of study blocks**

The aim of this item was to find out whether study blocks were organised in a way that promoted student nurse teaching and learning. These findings are presented in Table 7.2.
Table 7.2: Nurses teachers’ responses with regard to whether study blocks are organised in such a way as to promote student nurses’ teaching and learning (n=40)

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<tr>
<td>25</td>
<td>62.5</td>
<td>15</td>
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Table 7.2 illustrates that the majority 25 (62.5%) of the 40 respondents felt that the study blocks were organised in a way that promoted student nurse teaching and learning. In contrast to this, 15 (37.5%) respondents felt that study blocks were poorly organised. These findings suggest that study blocks are well organised in general, but that various problems also exist.

The 25 (62.5%) respondents who agreed that the study blocks were organised in such a way as to promote teaching and learning were asked to explain how the organisation of study blocks promoted student learning. Their responses are presented in Figure 7.10. The total percentage does not add up to 100% because some respondents did not give responses.
Figure 7.10: Nurse teachers’ responses with regard to how the organisation of study blocks helped the teaching and learning of student nurses (n=25)

Figure 7.10 illustrates that the respondents who felt that study blocks were well organised gave three reasons for their belief that the organisation helped student learning. One of the reasons was also given and discussed under the positive aspects of study blocks in item 7. The reasons they advanced were as follows:

- Study blocks provide a learning environment that is conducive to student nurse learning because there is enough time to learn in a relaxed atmosphere (10 out of 25 respondents: 40.0%).

The other two reasons, which were given, were:

- Student nurses were taught theory that corresponded to their level (11 respondents: 44%).
- Study blocks helped to assess the progress of students because there was an examination at the end of the block (3 respondents: 12%).
These findings suggest that study blocks have the above-mentioned advantages and that these assist student nurses to learn.

The 15 (37.5%) out of 40 respondents who were of the opinion that the study blocks were not organised to promote student teaching and learning were asked to give their reasons why they believed that study blocks did not promote student teaching and learning. Their reasons are presented in Figure 7.11. The responses do not add up to 100% because some respondents did not give responses.

![Figure 7.11: Nurse teachers' opinions about how the organisation of study blocks does not promote student teaching and learning (n=15)](image_url)
Figure 7.11 shows that the respondents gave three reasons for believing that the organisation of study blocks does not promote student nurse teaching and learning. (Note that the immediately following reason was also given and discussed in item 8 under negative aspects of study blocks.)

- The fact that there is too much content in each study block compels students to resort to memorising the nurse teachers' notes (8 out of 15 respondents: 53.3%).

The following two reasons were also given.

- Because there are sometimes too many study blocks being held at a given time, nurse teachers simply do not have the time to do bedside teaching (3 respondents: 20%). [This finding suggests that nurse teachers are extremely busy when there are too many groups present in the school of nursing at any one time.]

- Student nurses are divorced from the clinical areas during study blocks (1 respondent: 6.7%).

**Item 9b: Organisation of clinical area placements**

This item aimed to find out from the respondents whether clinical area placements were organised in a way that promoted student learning. The responses are presented in Table 7.3.
Table 7.3: Nurse teachers’ responses with regard to whether clinical area placements are organised in such a way as to promote student nurses’ teaching and learning

<table>
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<th>YES</th>
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<td>F</td>
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<tr>
<td>11</td>
<td>27.5</td>
<td>29</td>
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Table 7.3 shows that the majority 29 (72.5%) out of 40 respondents felt that clinical area placements were not organised in a way that promoted student teaching and learning. Only 11 (27.5%) felt that they were organised in such a way as to promote student teaching and learning. This finding suggests that clinical placements are not being properly organised.

The 11 (27.5%) out of 40 respondents who agreed that clinical area placements were organised in such a way that it promotes student nurses’ teaching and learning were asked to justify the opinions. Their responses were categorised and are presented in Figure 7.12. The responses add up to more than 100% because some respondents gave more than one response.
Figure 7.12: Nurse teachers’ opinions about how the organisation of clinical area placements helps the teaching and learning of student nurses (n=11)

Figure 7.12 shows that the respondents gave the following two Reasons (which are also mentioned and discussed under item 7, that deals with positive aspects of clinical placements).

- Student nurses were placed in areas for which they would have covered some of the theory (9 out of 11 respondents: 81.8%). [This finding suggests that student nurses are allocated to clinical areas, which are relevant to some of the theoretical content which they have covered.]

- Assessments performed during clinical area placements are carried out in terms of the level of nurse training (4 respondents: 36.4%).

The 29 (72.5%) out of 40 respondents who felt that the clinical area placements were not organised in a way that promoted student learning
were also asked to give reasons. Their reasons are presented in Figure 7.13. The responses add up to more than 100% because some respondents gave more than one response.

![Bar chart showing reasons for opinions on clinical area placements](chart.png)

**Figure 7.13**: Nurse teachers' perceptions of how the organisation of clinical area placements did not help the teaching and learning of student nurses (=29)

Figure 7.13 shows that respondents gave the following four reasons for their opinions (they are also mentioned and discussed under item 8 which deals with negative aspects of clinical area placements).
• Students are not always allocated to clinical areas for which they have learnt the relevant theory and content in study blocks. This in effect means that students are being expected to do procedures for which they have not learnt the theory (26 out of 29 respondents: 89.7%). This finding informs us that the integration of theory with practice simply does not occur for most students. This major defect in student nurse education was also noted by Jacka and Lewin (1986:680) when they provided the disturbing example of how a theoretically unprepared and ignorant student would be allocated to cardiac wards for the whole of her first year and would then be taught the theory of cardiology in the second year.

• Student nurses are used to perform non-practical nursing tasks in the clinical areas. Their time is not therefore devoted entirely to learning (10 respondents: 34.5%).

• Student nurses are overworked because there are too many patients in wards in combination with an inadequate number of staff to nurse patients in wards (2 respondents: 6.9%).

• There is a chronic shortage of the material resources that are indispensable for skills training (1 respondent: 3.4%).

The other reasons, which were given, were the following:

• Supervision and teaching are inadequate because of a shortage of ward staff (6 respondents: 20.7%).

• Certain provinces do not have accommodation for student nurses during their community placements (3 respondents: 12%).
**Item 10a: The extent to which specific teaching methods are used in study blocks**

The aim of this item was to find out from the respondents the extent to which they used specific teaching methods in study blocks. A four point rating scale of “always”, “often”, “seldom” and “never” was used. This was collapsed into two scales by merging “often” and “always”, and “seldom” and “never”. The responses are presented in Figure 7.14.

**Figure 7.14: Nurse teachers’ responses about the extent to which they used specific teaching methods in study blocks**

Figure 7.14 shows that the lecture method is the most frequently used teaching method in study blocks. It was used “often to always” by 39
(97.5%) out of 40 respondents, while only 1 (2.5%) "Seldom to never" used it. The next most frequently used method was student-led discussions, which were used "often to always" by 31 (77.5%) out of 40 respondents and "seldom to never" by 9 (22.5%) respondents. Tutorials led by nurse teachers were used "often to always" by 29 (74.4%) out of 39 respondents and "seldom to never" by 10 (25.6%) respondents. Demonstrations were used "often to always" by 25 (62.5%) respondents and "seldom to never" by 15 (37.5%) out of 40 respondents.

Those teaching methods, which were less frequently used, were ward rounds, which were "seldom to never" used by 34 (87.2%) out of 39 respondents, and "often to always" by 5 (12.8%) respondents. Role-plays were "seldom to never" used by 29 (74.4%) out of 39 respondents, and "often to always" by 10 (25.6%) respondents. Care plan presentations were "seldom to never" used by 23 (59.0%) out of 39 respondents, and were "often to always" used by 16 (41.0%) respondents.

These findings suggest that nurse teachers mostly use didactic methods. This confirms the research findings of Bligh (1971), who noted that didactic teaching methods are mostly used in classroom teaching because of the voluminous amount of new theory that student nurses have to master before they are allocated to relevant clinical areas.
The respondents were also asked to supply reasons for their ratings and indicate what methods they would have liked to use if no constraints prevailed. The responses they gave are presented in Figures 7.14.1 and 7.14.2 respectively. The responses add up to more than 100% because some respondents gave more than one response.

![Bar Chart](image)

**Figure 7.14.1** Nurse teachers' justifications for their ratings of the given teaching methods (n=40)

Figure 7.14.1 shows that several categories of reasons emerged from the responses of nurse teachers in which they gave their justifications for
their ratings of the given teaching methods. These categories are as follows:

- Lecture methods are good if too much content has to be taught to large groups of student nurses and if a lot of new information also has to be imparted (34 out of 40 respondents: 85.0%).

- Student participatory methods enhance learning by motivating and helping students to develop critical thinking skills (25 respondents: 62.5%).

- Because of a chronic shortage of teaching and learning resources, the lecture method is most frequently used by those nurse teachers who carry most of the teaching burden (5 respondents: 12.5%).

- Lectures are a convenient and easy method of teaching (3 respondents: 7.5%).
Figure 7.14.2: Nurse teachers’ responses with regard to the teaching methods they would have used in study blocks if there had been no constraints (n=40)

Figure 7.14.2 shows the categories that emerged from the responses of nurse teachers when they were asked what teaching methods they would have used if there had been no constraints in the teaching situation. Their preferred methods would have been:

- Television and radio, study guides and learning packages (31 out of 40 respondents: 77.0%).
- Lecture demonstration (22 respondents: 55%).
- Assignments, case studies and case presentations (22 respondents: 55%).
- Group work and student-led discussions (20 respondents: 50%).
- Role plays (5 respondents: 12.5%).
• Taking students to the clinical areas to see the actual conditions that are being described in lectures (i.e. problem-based learning) (10 respondents: 25%).
• Role plays (5 respondents: 12.5%).

The methods, which were suggested are mostly action-learning and participatory methods, which involve learners in their own, learning. These findings suggest that nurse teachers are indeed aware that student nurses, as adult learners; need to be actively involved in their learning (Knowles & Associates: 1984:57).

Item 10b: The extent to which specific teaching methods are used during clinical area placements

The aim of this item was to find out from the respondents the extent to which they used specific teaching methods during clinical area placements. A four-point rating scale of “always”, “often”, “seldom” and “never” was used, and this scale was collapsed into the two categories “often to always” and “seldom to never”. The responses are shown in Figure 7.15.
Figure 7.15: Nurse teachers’ responses about the extent to which they used specific teaching methods during clinical area placements

Figure 7.15 shows that demonstrations are the most frequently used method of teaching during clinical area placements. They were used “often to always” by 31 (81.6%) out of 38 respondents. This was followed by ward rounds, which were used “often to always” by 24 (64.9%) out of 37 respondents.
The methods less frequently used were role plays, which were “seldom to never” used by 31 (83.8%) out of 37 respondents, lectures which were “seldom to never” used by 26 (74.3%) out of 35 respondents, and tutorials led by nurse teachers which were “seldom to never” used by 22 (57.9%) out of 38 respondents. These findings seemed to indicate that not much formal teaching is done in clinical areas. This observation is similar to that of Jacka and Lewin (1986:53), who found that student nurses spend very little time with professional staff and that they receive very little teaching while working in the wards.

The respondents were asked to justify their ranking and to indicate what methods they would have liked to use had there been no constraints. Their responses are presented in Figures 7.15.1 and 7.15.2. The responses add up to more than 100% because some respondents gave more than one answer.
Figure 7.15.1: Nurse teachers’ justifications of their ranking of teaching methods used during clinical placements (n=40)

Figure 7.15.1 illustrates the categories that emerged from content analysis of the justifications, which nurse teachers gave for their ratings of the given teaching methods. The categories are as follows:

- The preferred methods are suitable for integrating theory with practice (21 out 40 respondents: 52.5%).
- The preferred methods are convenient and they do not take up too much time. Time is a vital consideration because student groups are so large (17 respondents: 42.5%).
- The preferred methods enable the active participation of students and provide immediate feedback (11 respondents: 27.5%).
- They do not go to clinical areas frequently (4 respondents: 10%).
Figure 7.15.2: Nurse teachers’ preferences with regard to the methods they would use in clinical area placements if there were no constraints (n=40)

Figure 7.15.2 illustrates the methods that respondents would use most frequently if there were no constraints. These methods were:

- Case presentations and care plan presentations (24 out of 40 respondents: 60.0%)
- Demonstrations (21 respondents: 52.5%)
- Ward rounds (14 respondents: 35%)
- Bedside teaching and tutorials (13 respondents: 32.5%)
- Student-led discussions (12 respondents: 30%)
- Case studies (9 respondents: 22.5%)
- All the given teaching methods (4 respondents: 10%).
Item 11: Clinical teaching during clinical area placements

The aim of this item was to find out from the respondents the extent to which they carried out bedside and clinical teaching during student nurses' clinical area placements. The findings are presented in Figure 7.16.

![Bar chart showing nurse teachers' ratings of the extent to which they carry out bedside or clinical teaching during student nurses' clinical area placements (n=40)]

**Figure 7.16:** Nurse teachers' ratings of the extent to which they carry out bedside or clinical teaching during student nurses' clinical area placements (n=40)
Figure 7.16 shows that the majority 24 (60%) of the 40 respondents said that they seldom carried out bedside teaching. Only 1 (2.5%) respondent said she had never done bedside teaching. But 15 (37.5%) respondents felt they had often carried out bedside teaching. These findings suggest that involvement of nurse teachers in the clinical education of students is minimal. This confirms research of Bendall (1975), who found that most of the teaching of student nurses was done by ward sisters and not by nurse teachers.

The comments of the respondents were categorised and are presented in figure 7.17. The responses add up to more than 100% because some respondents gave more than one response.
Figure 7.17: Nurse teachers' comments about the extent to which they conduct bedside/clinical teaching during student nurses' clinical area placements (n=40)

Figure 7.17 shows the comments made by respondents about the extent to which nurse teachers carry out bedside teaching during student nurses' clinical area placements.

- The amount of work that student nurses have to do prevents nurse teachers from doing as much clinical teaching as they would like to (26 out of 40 respondents: 65.0%).
Because nurse teachers have an enormous amount of work to do (they have continuous teaching commitments and have to prepare lessons and mark end-of-block examinations), they have no extra time for teaching (25 respondents: 62.5%).

When nurse teachers do go to clinical areas, they go in order to assess students rather than teach them in a clinical setting (5 respondents: 12.5%).

Clinical teaching is carried out during random follow-ups of student nurses (1 respondent: 2.5%)

These findings suggest that clinical teaching is not planned and that it is assessment-orientated. This finding is confirmed by the research of Uys (1992:23), who found that clinical teaching was rarely done in any systematic or planned manner and that it was perceived by student nurses to be assessment-orientated.

**Item 12: Preparation of student nurses for clinical area responsibilities**

The aim of this item was to find out from the respondents whether student nurses have the theoretical background for the responsibilities they have to bear during clinical area placements. The responses are presented in table 7.4.
Table 7.4: Nurse teachers' responses about whether student nurses have the theoretical background for clinical responsibilities (n=40)

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<td>85</td>
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The majority, i.e. 34 (85%) out of 40 respondents, felt that the student nurses have enough theoretical knowledge to function satisfactorily during their clinical placements. Only 6 (15%) respondents felt that student nurses did not have the necessary theoretical background. This finding suggests that student nurses are allocated to relevant clinical areas after study blocks in which practical procedures have been demonstrated.

The 34 (85%) out of 40 respondents who felt that student nurses have an adequate theoretical background for the responsibilities given to them during clinical placements were asked to give reasons for their opinions. The reasons were categorised and are presented in Figure 7.18. The percentage does not add up to 100% because some respondents gave more than one answer.
Figure 7.18: Nurse teachers’ reasons for believing that student nurses have the theoretical background for clinical responsibilities (n=34)

Figure 7.18 shows that the respondents gave two reasons for believing that student nurses have the necessary theoretical background. (These reasons are also given and discussed in item 7 under positive aspects of clinical area placements.)

- Student nurses have the opportunity to apply their knowledge to clinical practice (29 out of 34 respondents: 85.3%).
- Student nurses are given objectives to achieve during their clinical area placements (6 respondents: 17.6%).
The 6 (15%) out of 40 respondents who felt that student nurses sometimes do not have the required theoretical knowledge for them to discharge their clinical duties competently gave only one reason. (This reason was also given and discussed in item 8 under *negative aspects of clinical area placements*.) The reason is:

- The allocation of student nurses to clinical areas is not usually based on the theory that they have learnt but on the immediate needs of the hospital service. Student nurses therefore find themselves attempting to carry out procedures about which they have not been informed in study blocks (6 out of 6 respondents: 100%).

**Item 13: Provisions made for student nurses to do individual study during clinical area placements**

The aim of this item was to find out whether respondents had in any way encouraged student nurses to do individual study during their clinical area placements. The findings are presented in Table 7.5.

**Table 7.5: Nurse teachers’ responses about whether they had made any provisions for student nurses to do individual study during their clinical area placements (n=40)**

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<td>35</td>
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Table 7.5 shows that the majority (26: 65%) of the 40 respondents felt that they do not make any provision for students to do individual study during clinical area placements. However 14 (35%) respondents felt that they did make provisions for individual study by student nurses. This
finding suggests that student nurses are given no formal assignments to encourage them to undertake individual study.

The 14 (35%) out of 40 respondents, who felt that they did make provision for students to do individual study during clinical area placements, described the provisions, which they made. These are presented in Figure 7.19. The responses add up to more than 100% because some respondents gave more than one response.

![Figure 7.19: Nurse teachers’ responses with regard to the provisions they make for student nurses to do individual study (n=14)](image-url)
Figure 7.19 shows that there are two main provisions that nurse teachers make to encourage student nurses to do individual study. This is what emerged from a content analysis of responses to this question.

- Sometimes they give homework to student nurses who request it (14 out of 14 respondents: 100%).
- Sometimes they do clinical teaching or arrange tutorials (9 respondents: 64.3%).

The 26 (65%) out of 40 respondents who felt that they do not make provisions for student nurses to do individual study during clinical area placements gave responses that were categorised and presented in Figure 7.20. The total responses add up to more than 100% because some respondents gave more than one response.
Figure 7.20: Nurse teachers’ reasons for not making provisions for student nurses to do individual study (n=26)

Figure 7.20 illustrates the several reasons given by respondents. They were categorised as follows:

- Student nurses are busy in the clinical areas most of the time (17 out of 26 respondents: 65.4%).
- Student nurses may request individual help from those teachers for additional guidance about learning – and can themselves engage in more learning, if they are motivated to do so, when they go on off duties (8 respondents: 30.8%).
• Tutors do not make provision for more learning because of their heavy workloads (7 respondents: 26.9%).

• “Provision for more learning” does not form part of the block system because students will have been adequately taught in their study blocks (4 respondents: 15.4%).

These findings suggest that no compulsory assignments are given to student nurses to motivate their continued learning during clinical area placements.

**Item 14: Guidance and support given to clinical area staff**

The aim of this item was to find out whether respondents gave guidance and support to clinical supervisors so that they could assist student nurses to learn during their clinical area placements. The responses are presented in Table 7.6

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<td>85</td>
<td>6</td>
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Table 7.6 shows that the majority (34: 85%) out of 40 respondents felt that they gave guidance and support to clinical supervisors so that they could assist in the teaching and learning of student nurses. Only 6 (15%) respondents felt that they did not give guidance and support to clinical supervisors. These findings suggest that guidance and support are given to clinical staff.
The 34 (85%) out of 40 respondents who agreed that they give guidance and support to clinical supervisors mentioned activities which were categorised and which are presented in Figure 7.21. The total percentage adds up to more than 100% because some respondents gave more than one response.

Figure 7.21: Nurse teachers’ responses about what they do to guide and support ward staff (n=34)

Figure 7.21 shows that the following five activities were undertaken by nurse teachers to support and guide ward staff:
- They follow up student nurses in the clinical areas to do clinical teaching (28 out of 40 respondents: 84.4%).
• They organise in-service training courses for sisters such as the clinical assessor’s course (13 respondents: 32.3%).

• They set objectives for student nurses to achieve in the clinical areas (3 respondents: 8.8%).

• The procedure manual committee, which consists of school and clinical area staff, continually updates the procedure manual by reviewing common procedures (3 respondents: 8.8%).

• They support and encourage clinical staff by praising and commending them on the clinical teaching and supervision of student nurses and they discuss end-of-block and clinical attachment evaluations (2 respondents: 5.8%).

The 6 (15%) respondents who said that they do not give guidance and support to clinical area staff to assist the teaching and learning of student nurses during clinical placements gave responses, which were reduced into the following two categories of reasons:

• Nurse teachers are too busy teaching in the classroom, planning and marking examinations (5 out of 6 respondents).

• There are too many students and there is a shortage of nurse teachers (5 out of 6).

The reasons thus provided are similar to those reported by Ferguson and Jinks (1994) who found that nurse teachers attributed the lack of involvement in the teaching and supervision of student nurses in the clinical areas to the fact that their onerous classroom and administrative responsibilities left them no additional time.
Item 15: Communication between the school of nursing and clinical area staff

This item aimed to find out from the respondents how they rate the communication between the school of nursing and clinical supervisors. They were asked to indicate this on a 3-point rating scale of “good”, “satisfactory” and ‘poor’. The responses are presented in Figure 7.22.

Figure 7.22: Nurse teachers’ ratings of the communication between the school of nursing and clinical area staff (n=40)
Figure 7.22 makes it evident that the majority 21 (52.5%) out of 40 respondents felt that the communication between the school of nursing and clinical area staff is *satisfactory* – 11 (27.5%) respondents felt that it was *good*. Only 8 (20%) respondents felt it was *poor*. The majority, 32 (80%), therefore felt that the communication was “satisfactory to good”. This finding is different from that produced by Alexander’s (1983:206) research, who found that thirty-three percent of ward staff actually complained of poor communication between themselves and nurse teachers.

The respondents were then asked to justify their rating of the communication. The responses they gave are presented in Figure 7.23. The responses do not add up to 100% because some respondents did not give responses.
Figure 7.23: Nurse teachers’ justifications of their rating of the communication between the school of nursing and clinical area staff (n=32)

Figure 7.23 illustrates the reasons, which emerged from the responses given by the 32 out of 40 nurse teachers for believing that there was “satisfactory to good” communication between the school and clinical areas. They justified their ratings in the following ways:

- A free and easy exchange of information takes place, for example, in meetings (18 out of 40 respondents: 56.3%).
• The appointment of a public relations officer has facilitated communication (6 respondents: 18.8%).
• They make follow-ups and visits to wards to undertake clinical teaching (2 respondents: 6.3%).
• They organise workshops to facilitate communication (2 respondents: 6.3%).

The reasons, which were given by 8 out of 40 nurse teachers for believing that the communication was poor, were categorised. They are presented in Figure 7.24. The responses add up to more than 100% because some respondents gave more than one response.
Problem-orientated communication

No meetings

Shortage of nurse teachers

Different perspectives

Strained relationships

Figure 7.24: Nurse teachers' reasons for believing that communication between the school of nursing and clinical area staff was poor (n=8)

Figure 7.24 shows the reasons that respondents gave for believing that the communication was poor.

- The communication is generally problem-orientated, i.e. sisters only communicate when they experience problems with students (8 out of 8 respondents: 100%)
• Because there are no meetings to discuss student learning and no forum for general discussion, nurse teachers do not know what happens in the wards (5 respondents: 62.5%).
• There is a chronic shortage of nurse teachers and nurse teachers are always busy. This hampers communication (4 respondents: 50%).
• The school of nursing staff and the clinical area staff have different perspectives or points of view (3 respondents: 37.5%).
• Relationships between the school and the clinical area staff are strained (2 respondents: 25%).

The suggestions made by the respondents on how to improve communication between the school and clinical area staff were categorised and are presented in Figure 7.25. The responses add up to more than 100% because some respondents gave more than one response.
There should be regular meetings between the school and clinical staff, for example, to discuss student nurses’ programmes, as well as joint committees to discuss school and clinical area activities (30 out of 40 respondents: 75.0%).

There should be a clarification of the objectives of the school of nursing and of the clinical areas respectively (15 respondents: 37.5%).
• A reciprocal staff exchange (arranged by means of seconding school staff to clinical areas and vice versa) should improve communication (9 respondents: 22.5%).

• Continuing education should be carried out on a regular basis so that the knowledge and skills of clinical area staff can be updated (8 respondents: 19%).

• Reports about weak students should be provided by both school staff and clinical area staff (5 respondents: 12.5%).

**Item 16: Suggestions on how to improve study blocks and clinical area placements**

This item aimed to elicit suggestions from the respondents about how study blocks and clinical area placements could be improved so that the teaching and learning needs of students nurses could be promoted.

These suggestions were categorised and are presented in Figure 7.26. The responses add up to more than 100% because some respondents gave more than one response.
Figure 7.26: Nurse teachers' suggestions about how to improve study blocks (n=14)

Figure 7.26 illustrates the various suggestions that respondents made. They were:

**Reduce the tutor-student ratio.** This was suggested by 25 (62.5%) out of 40 respondents who used statements such as:

- Reduce the number of students.
- Recruit more tutors.
- Smaller student groups.
Reduce the content per study block. This was suggested by 23 (57.5%) respondents. The respondents revealed this by using statements such as:

- Reduce topics per block
- Less information per lecture
- Increase the duration of blocks

Provide adequate teaching and learning resources. This was suggested by 20 (50.0%) respondents. They revealed this by the use of statements such as:

- Need for adequate teaching aids.
- Source for more books
- Reference materials required.

Use of participatory teaching methods. This was suggested by 5 (12.5%) respondents. They used statements such as:

- More active student involvement
- More self-directed learning such as group discussions and case presentations.
- Ward visits to put theory into practice
- More demonstrations during study blocks

Reduce student intakes from 3 to 2. This was indicated by 3 (7.5%) respondents. This was revealed by responses such as:

- The number of student intakes should be decreased to 2 to reduce the number of study blocks

Nurse teachers should undertake more clinical teaching. This was highlighted by 1 respondent (2.5%) and was revealed by the comment:
• Tutors to allocate more time to clinical areas so that they can supervise students. [This finding is similar to that of Reid (1985) who found that nurse teachers seldom teach in the clinical areas.]

Examinations to be written from the wards/clinical areas. This was suggested by 1 respondent (2.5%) and was clear from the response:

• Examinations should be written in clinical areas. This will allow students to confirm theory from their experiential learning and observations.

The above findings suggest that study blocks have many negative features which inhibit the teaching and learning of student nurses during study blocks.

The suggestions given for improving student teaching and learning during clinical area placements were categorised and are presented in Figure 7.27. The responses add up to more than 100% because some respondents gave more than one response.
Increase supervisors and more supervision. This was suggested by 29 (72.5%) out of 40 respondents. They suggested this by using statements such as:

- Employ more trained staff/supervisors.
- Incentives to retain experienced trained staff.
• More trained staff for bedside teaching.
• More trained staff to supervise and instruct students.
• Increase staff in the wards in order to reduce nurse patient ratios.

**Allocation to clinical areas should be based on content covered.** This was suggested by 15 (37.5%) respondents. This was suggested by statements such as:

• Placements should be made in accordance with whatever content has been covered.
• Theory and practice should follow consecutively so that the theory-practice gap can be closed.
• Students should be allocated to a clinical area after they have been taught the necessary theory.

**The provision of teaching and learning resources should be commensurate with the needs of both students and staff.** This was suggested by 15 (37.5%) respondents in statements such as:

• More books for student learning.
• More equipment and materials for student learning.
• More equipment and materials for procedures.
• Provide transport for student follow up during community placements.

**Reduce inappropriate student off duties and tasks.** This was suggested by 11 (27.5%) respondents in statements such as:

• Reduce night duties for student nurses.
• Define student duties so that they can learn.
• More off duties for students to study.
• No supervision or learning on night duty – so reduce them.
Nurse teachers should undertake clinical teaching. This was suggested by 9 (22.5%) respondents in statements such as:

- More follow ups of students by tutors.
- Tutors to assist students to settle in wards.
- Tutors to help link theory and practice in wards.
- Tutors to supervise and monitor student learning in wards.

Student status for student nurses. This was suggested by 8 (20%) respondents in statements such as:

- Students to go to clinical areas for learning purposes only.
- Students to be supernumerary.
- Students should not be used as pairs of hands.

Increase supervision/teaching of student nurses. This was indicated by 8 (20%) respondents and was clear from responses such as:

- Trained staff need to give more supervision to student nurses
- Supervision and monitoring of students
- Appoint staff who are willing to teach
- Identify ward sisters solely for clinical teaching
- Mentors to guide and support student nurses
- Acquisition of skills to be documented

The frequency of night duty should not be excessive and should be stipulated. This was highlighted by 6 (15%) respondents and was revealed by responses such as:

- Reduce night duty
- Employ permanent night duty staff
- Night duty should be stipulated because it is not stipulated
Clinical supervisors should be given continuing education. This was suggested by 5 (12.5%) respondents in statements such as:

- Ward staff should be approachable and available for students to ask questions.
- Good staff attitudes to enhance learning.

The above findings suggest that there are many things that can be done to improve the teaching and learning of student nurses during clinical area placements.

7.3 SUMMARY

The majority of nurse teachers were mature female people who were older than 30 years of age. Many of them had already had more than six years of teaching experience. All the respondents were general nurses who possessed a nursing education qualification either at the diploma or degree level. Most of the respondents had a midwifery diploma and several of them had diplomas in various clinical courses.

The majority of respondents understood the meaning of the block system. Several positive features of study blocks were identified. These features included the availability of time for students to learn theory, the reinforcement of what is encountered by students in the clinical areas and the advantages inherent in teaching groups who are at the same level. The positive features of clinical area placements that were identified included the application of theory to practice by students, and having the opportunity to work in a team with other health workers.
Several negative features of study blocks were identified. These included too much content per study block, a shortage of teaching and learning resources, a lack of student motivation and a shortage of nurse teachers. The negative features of clinical area placements included a lack of proper student supervision, a lack of equipment for learning procedures, the overworking of student nurses, inappropriate clinical allocations and poor relationships between the school of nursing and the clinical area staff.

While the majority of respondents felt that study blocks were organised to promote the teaching and learning of student nurses, they nevertheless felt that clinical area placements were not well organised. Most of the respondents felt that student nurses possessed the theoretical background for the responsibilities to which they were assigned during clinical area placements. The most frequently used teaching methods during study blocks were, in descending order of frequency, lectures, student-led discussions and tutorials led by nurse teachers. The most commonly used methods used during clinical area placements were demonstrations and ward rounds.

Most of the respondents felt that they seldom carried out clinical or bedside teaching during student clinical placements and did not make any provision to encourage students to do individual study. The majority of respondents nevertheless felt that they gave guidance and support to clinical supervisors, which help them to teach student nurses. They also ranked the communication between the school of nursing and clinical area staff as “satisfactory to good”.
Several suggestions were made for the improvement of study blocks. These included a reduction of content per study block and increasing clinical teaching by nurse teachers. The suggestions which were made to improve clinical area placements included increasing the number of clinical supervisors, a requirement that allocation to clinical areas be based on content covered in study blocks, the provision of adequate resources, the elimination of inappropriate student duties and the involvement of nurse teachers in clinical teaching during the clinical area placement of student nurses.

In the following chapter, the data that was collected from clinical supervisors will be presented and analysed.
CHAPTER 8

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS OF CLINICAL SUPERVISORS' PERCEPTIONS OF THE BLOCK SYSTEM

8.1 INTRODUCTION

This chapter presents the data which was obtained from the clinical supervisors of student nurses about their perceptions of the block system in the three-year General Nurse Diploma Programme. The clinical supervisors were composed of clinical instructors, sisters in charge of wards/units and community health nurses who supervise student nurses during their clinical experience. The total sample was 114 and it consisted of 35 clinical instructors, 66 ward sisters and 13 community health nurses.

The data was collected by using self-administered questionnaires and by using questionnaires in interviews. The first section of the questionnaire, that is, items 1 to 7, elicited the biographical data of the clinical supervisors. The respondents were asked to circle the option that applied to them. Items 8 to 20 aimed to elicit the perceptions of clinical supervisors of the block system. Items 11, 14, 15, 16, 17, and 18 asked the clinical supervisors to select a positive (yes) or negative (no) response to questions about the block system and to elaborate on or amplify their answers.

Items 12 and 19 asked the respondents to rate specified activities relating to the teaching and learning of student nurses on a rating scale, and then to elaborate on or give reasons in support of their answers.
Items 8, 9, 10, 13 and 20 were open-ended questions which asked the respondents to give their views or opinions about the block system.

The data was analysed by means of descriptive statistics. The data is presented, analysed and interpreted item by item, and is summarised in figures and frequency tables.

The data from the open-ended questions were analysed by means of content analysis and by grouping similar data into themes or categories.

The purpose of this chapter is to present a profile of the clinical supervisors and to present and analyse their perceptions of the block system – whether positive or negative. The clinical supervisors were in charge of the various units or wards where student nurses are allocated for clinical experience. They therefore had first-hand experience of the block system and views and opinions about how it worked.

The number of respondents who answered specific items differs because some respondents did not respond to all the items. The percentages were calculated on the number of respondents who responded to each item (valid percentage).

8.2 SECTION A: Biographical information
The reason for obtaining biographical information was to provide a descriptive profile of the respondents. This provided a basis for the analysis of the findings.
Item 1: Gender

This item aimed to find out the gender of the respondents. The gender of the respondents is presented in figure 8.1.

Figure 8.1: Percentage distribution of clinical supervisors according to gender (n=114)

Figure 8.1 shows that the majority (109: 95.6%) out of 114 respondents were female. A very small number (5: 4.4%) of the respondents were male. This finding was expected because nursing is a female-dominated profession – as it has been since its inception.
Item 2: Age

This item was intended to elicit the ages of the respondents. The ages were divided into four groups of 10 year intervals, that is 29 and under, 30 to 39, 40 to 49, and 50 and over. The age distribution of the respondents is presented in figure 8.2.

![Pie chart showing age distribution of clinical supervisors](image)

Figure 8.2: Percentage distribution of clinical supervisors by age (n=113)

As is evident from figure 8.2, the majority, 51 (44.7%), out of 113 respondents, were between 30 and 39 years old, 47 (41.2%) were between 40 and 49, and 14 (12.3%) were over fifty years old. Only 2 (1.8%) respondents were less than 30 years old. This finding shows that the
majority of clinical supervisors are mature people who should be able to guide and support student nurses during their clinical experience.

**Item 3: Hospital/place of employment**

The aim of this item was to find out the distribution of clinical supervisors according to workplace. The distribution of clinical supervisors according to workplace is presented in Figure 8.3.

![Figure 8.3: Percentage distribution of clinical supervisors according to place of work (n=114)](chart)

**Figure 8.3: Percentage distribution of clinical supervisors according to place of work (n=114)**
As illustrated in Figure 8.3, the majority, 38 (33.3%) out of 114 respondents were employed at Parirenyatwa Hospital, 23 (20.2%) at Mpiolo, 22 (19.3%) at Harare Hospital, and 18 (15.8%) at United Bulawayo Hospital. These numbers are proportional to the numbers of sisters in charge and clinical instructors in these hospitals. Of the total number, 13 (11.4%) were community sisters from Mashonaland East Province.

**Item 4: Years of nursing experience**

This item aimed to find out the number of years of nursing experience (excluding training periods) that respondents possessed. The nursing experience was divided into five groups of 5-year intervals, that is, 1 to 5, 6 to 10, 11 to 15, 16 to 20, and 21 and over. The findings are presented in Figure 8.4.
Figure 8.4 shows that the majority, 38 (33%) out of 114 respondents had 16-20 years experience. Thirty two (28%) respondents had 11-15 years of experience, 27 (24%) had 21 and over years of experience, and 15 (13%) had 6-10 years of experience. Only 2 (2%) respondents had 1-5 years of experience as nurses while 112 (98.2%) of the respondents had 6 and more years of experience. This finding suggests that clinical supervisors are experienced in the nursing profession and are therefore in a position to facilitate the clinical experiences of student nurses. In addition, these
findings suggest that the clinical supervisors’ perceptions of the block system are based on a great deal of experience.

**Item 5: Number of years involved in the teaching and supervision of student nurses**

The aim of this item was to find out the number of years in which respondents had been involved in the teaching/supervision of student nurses in their current posts. The years of experience were divided into six groups of 'less than 1 year”, “1 to 5”, “6 to 10”, “11 to 15”, “16 to 20” and “21 and over”. The findings are presented in figure 8.5.

Figure 8.5: Percentage distribution of clinical supervisors according to years involved in teaching and supervision of student nurses (n=114)
Figure 8.5 shows that the majority, 38 (33.3%), of 114 respondents had 1 to 5 years experience in the teaching and supervision of student nurses in their present post. Thirty (26.3%) respondents had 6 to 10 years experience; 21 (18.4%) had 11 to 15 years experience; 8 (7.0%) had 16 to 20 years experience, and 11 (9.6%) had 21 and more years experience in their present post. Thus, 70 (61.3%) respondents had 6 or more years experience. Only 6 (5.3%) respondents had less than 1 year experience. These findings suggest that the majority of the clinical supervisors were experienced in the teaching and supervision of student nurses. One may therefore assume that their perceptions of how the block system works in the teaching and learning of student nurses is based on many years of experience as sisters in charge, clinical instructors or community sisters.

**Item 6: Department/ward of clinical supervisors**

This item aimed to identify the department/ward of which supervisors (except clinical instructors) were in charge. The findings are presented in Figure 8.6.
Figure 8.6 Distribution of clinical supervisors in terms of the department/ward of which they were in charge (n=79)

The majority 27 (34%) out of 79 respondents were in charge of surgical wards, followed by 19 (24%) in medical wards, community health 11 (14%), Paediatrics 6 (8%), casualty 4 (5%), outpatients 4 (5%). Eight (10%) respondents were in charge of other areas, namely gynaecological ward 5 (6.3%), operating theatre 2 (2%) and ophthalmic unit 1 (1.3%).

Item 7: Professional qualifications

This item aimed to identify the professional qualifications of respondents. Their responses are presented in Table 8.1. The responses add up to more
than 100% because some respondents had more than one post-registration qualifications.

Table 8.1: Distribution of clinical supervisors according to professional qualifications (n=114)

<table>
<thead>
<tr>
<th>Professional Qualification</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered General Nurse</td>
<td>114</td>
</tr>
<tr>
<td>State Certified Midwife</td>
<td>87</td>
</tr>
<tr>
<td>Psychiatric Nursing Diploma</td>
<td>19</td>
</tr>
<tr>
<td>Community Health Nursing Diploma</td>
<td>12</td>
</tr>
<tr>
<td>Nursing Administration Diploma</td>
<td>9</td>
</tr>
<tr>
<td>Operating Theatre Diploma</td>
<td>8</td>
</tr>
<tr>
<td>Intensive Care Nursing Diploma</td>
<td>3</td>
</tr>
<tr>
<td>Paediatric Nursing Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Industrial Nursing Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Ophthalmic Nursing Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Renal Nursing Diploma</td>
<td>1</td>
</tr>
<tr>
<td>Thoracic Nursing Diploma</td>
<td>1</td>
</tr>
<tr>
<td>Certificate in Tropical Diseases</td>
<td>1</td>
</tr>
<tr>
<td>Diploma in Nursing Education</td>
<td>1</td>
</tr>
</tbody>
</table>

As illustrated in Table 8.1, all 114 (100%) respondents were registered as nurses who possessed the General Nurse Diploma. A high percentage, namely 87 (76.3%) of the respondents, had a midwifery qualification. Nineteen (16.7%) possessed a Psychiatric Nursing Diploma. Twelve (10.5%) of the respondents possessed a Community Health Nursing
Diploma, 8 (7.0%) an Operating Theatre Nursing Diploma, 9 (7.9%) a Nursing Administration Diploma, 3 (2.6%) an Intensive Care Nursing Diploma, 2 (1.8%) an Ophthalmic Nursing Diploma, and 2 (1.8%) an Industrial Nursing Diploma. Other professional qualifications possessed by 1 each (0.8%) of the respondents was a Diploma in Nursing Education, a Renal Nursing Diploma, a Thoracic Nursing Diploma and a Certificate in Tropical Diseases. These findings show that the clinical supervisors had trained in a number of clinical courses which made them specialist nurses in those areas. This is to the advantage of student nurses because they must benefit from their clinical supervisors’ expertise in various subjects.

SECTION B:
Clinical supervisors’ perceptions about the block system

Item 8: Understanding of the block system

The aim of this item was to find out from respondents whether or not they understood the term “block system”.
Figure 8.7 makes it clear that the majority, 65 (59.1%) out of 110 respondents, clearly understood the meaning of the term “block system”. However, 45 (40.9%) respondents did not clearly understand the meaning of the term “block system”. This finding suggests that although the majority of clinical supervisors understand what the block system means, there is a high percentage of supervisors who do not understand what it means. The implication of this is that some clinical supervisors may not be able to assist student nurses effectively if they do not understand what the block system means.
Item 9: Positive aspects of the study block and clinical area placement system

This item was intended to find out what respondents identified as the positive aspects of the study block and clinical area placement system which is used in the education of student nurses.

The responses regarding positive aspects of study blocks are presented in Figures 8.8. The responses add up to more than 100% because some respondents gave more than one response.

Figure 8.8: Clinical supervisors' identification of positive aspects of the study block system used in student nurse education (n=114)
Figure 8.8 shows that the respondents identified a variety of positive aspects of the study block system.

**An environment conducive to learning.** This was indicated by 74 (64.9%) respondents and was revealed by responses such as:
- Gives them a break from ward manual work.
- Theory is delivered in a conducive atmosphere.
- Organized teaching/learning sessions

**Availability of time for acquiring knowledge and skills.** This was mentioned by 53 (46.5%) out of 114 respondents and was revealed by responses such as:
- Students can learn more
- Students have time to have theory input without disturbance.
- There is time to consolidate theory input.

**Facilitation of learning by nurse teachers.** This was indicated by 30 (26.3%) respondents and was revealed by responses such as:
- Assignments are given by tutors.
- Tests and examinations encourage us to study.

**Availability of learning resources.** This was indicated by 29 (25.4%) respondents and was clear from responses such as:
- We have facilities like books in the library.
- Models, charts, handouts and television and video are available in the school.
Attend study block as a group. This was indicated by 26 (22.8%) respondents and was clear from comments such as:
- Students are together as a group and they can share ideas.
- Uniform learning opportunities.
- Students learn together.

Integration of theory and practice. This was mentioned by 8 (7.0%) respondents and was revealed by responses such as:
- Students understand the conditions better after seeing them in the wards.
- Consolidate what they have learnt in the wards.

Evaluation. This was mentioned by 6 (5.3%) respondents and was revealed by responses such as:
- Assessed by tests.
- Assessed by examinations as a group.

The above-mentioned positive aspects of study blocks suggest that student nurses receive opportunities to learn in an environment which enhances learning. The learning of students takes place in a controlled environment, and they are given feedback in the tests which they write (such tests stimulate their desire to learn).

The various responses which identified the positive aspects of the clinical area placement system which promote the education of student nurses are presented in Figure 8.9. The responses add up to more than 100% because some respondents gave more than one response.
Figure 8.9: Clinical supervisors' identification of the positive aspects of the clinical area placement system which is used in the education of student nurses (n=114).

Figure 8.9 shows that respondents identified several positive aspects of the clinical area placement system. They have been categorised as follows:

Integration of theory and practice. This was indicated by 89 (78.1%) out of 114 respondents and was clear from responses such as:
- Students have a feel of the actual patients.
- Students see the actual conditions on patients.
- Students are placed in clinical areas to apply theory covered in study blocks
- Students learn by experience.
- Enhance students’ confidence.
- Integration of theory and practice because students are allocated to areas where theory would have been covered.

Facilitation of students’ learning by clinical supervisors. This was mentioned by 76 (66.7%) respondents and was clear from responses such as:
- Sisters assist students to learn by follow ups.
- Sisters and Clinical Instructors give homework to weak students.
- Clinical experience is supervised by qualified staff and doctors.

Students are motivated. This was mentioned by 13 (11.4%) respondents and was clear from responses such as:
- Students try their best
- Students are motivated.

Communication between the school and clinical area staff. This was mentioned by 5 (4.4%) respondents and was revealed by responses such as:
- Tutors organize periodic in-service training on new trends.
- Tutors organize procedure manual committee meetings.

Break from lectures. This was mentioned by 1 (0.9%) respondent and was revealed by the comment:
- Students have a break from lectures.
Evaluation by practical assessments. This was mentioned by 1 (0.9%) respondent and was revealed by the comment:
  • Can evaluate student nurses by follow ups and assessments.

Item 10: Negative aspects of the study block and clinical area placement system

This item aimed to identify what clinical supervisors regarded as the negative aspects of study block and clinical area placement system which is used in the education of student nurses. The responses are presented in Figure 8.10. The responses add up to more than 100% because some respondents gave more than one response.
Figure 8.10: Clinical supervisors’ identification of negative aspects of the study block system, which obstruct the education of student nurses (n=114)

Figure 8.10 illustrates the various negative aspects of the study block system, which obstruct the teaching and learning of student nurses. These responses were grouped into the following categories.
Inadequate resources. This was mentioned by 57 (49.2%) out of 114 respondents and was revealed by comments such as:

- Inadequate books in the school of nursing
- No up to date reference books and visual aids

Shortage of nurse teachers. This was mentioned by 52 (45.6%) respondents and was revealed by responses such as:

- Shortage of tutors
- Too much work for tutors
- High student-tutor ratio

Large classes. This was mentioned by 48 (42.1%) respondents and was clear from responses such as:

- Large groups are difficult to control
- Students do not see demonstrations especially those at the back of the group.

Too much content for the study block periods. This was mentioned by 24 (21.1%) respondents and was revealed by responses such as:

- The curriculum is packed with too much information
- Too much content in a short time
[Students memorize information only in order to pass examinations and clinical assessments.]

Lack of knowledge about what happens in study blocks. This was indicated by 22 (19.3%) respondents and was clear from responses such as:

- I do not know what happens in study blocks
• No idea what happens during study blocks
[This finding suggests that the school of nursing and clinical supervisors do not work as a team but as two separate entities.]

**Study blocks are too long.** This was stated by 9 (7.9%) respondents and was clear from responses such as:
- Study blocks are too long
- Students become theory orientated at times

**Too many study blocks at a time.** This was indicated by 4 (3.5%) respondents and was clear from responses such as:
- Shortage of time because of length of study blocks
- Overlapping of study blocks
- Too many study blocks taking place

**Theory-practice gap.** This was mentioned by 3 (2.6%) respondents and was clear from responses such as:
- What is taught in the school might not be the reality in the practical area.
- Study blocks do not expose students to real situations
- Students may not practise what is taught due to staff shortages
- Students cover information from blocks, which generalises the conditions
- Theory is prolonged without practicals

[The above comments suggest that these are all causes of the gap between theory and practice. This finding confirms the conclusion of McCaugherty (1991), who wrote that theory teaching, text books and nursing curricula all]
possess characteristics which make them imperfect representations of actual nursing practice. The effects of social and psychological atmosphere may, for example, contribute towards a widening of the theory-practice gap.

Lack of student nurse motivation. This was mentioned by 2 (1.8%) respondents and was clear from responses such as:
- Students lack motivation
- Too much spoon feeding of students

Postponement of study blocks. This was mentioned by 1 (0.9%) respondent and was revealed by the response:
- Sometimes study blocks are delayed and students remain in the wards

The above-mentioned findings suggest that there are many negative features inherent in the study block system and that these obstruct the optimal education of student nurses.

The responses that identify the negative aspects of the clinical area placement system (which obstruct the education of student nurses) were grouped into categories. These findings are presented in Figure 8.11. The responses add up to more than 100% because some respondents gave more than one response.
Figure 8.11: Clinical supervisors' perceptions of the negative aspects of the clinical area placement system, which obstruct the education of student nurses (n=114)

Inadequate teaching/supervision of student nurses. This was mentioned by 82 (71.9%) out of 114 respondents and was revealed by responses such as:
• Lack of adequate teaching, supervision and guidance from clinical staff.
• Sisters too busy to do follow ups on students
• Lack of enthusiasm to teach by staff due to overwork
• Lack of adequate time to follow up all students by clinical instructors.

**Overworking of student nurses/excessive workload.** This was mentioned by 73 (64.0%) respondents and was revealed by responses such as:
• Students have little time to learn
• Students are overworked due to trained staff shortage.
• Too much workload for students and they are too tired to study after work
• Students are used as pairs of hands

[This finding suggests that the student nurses’ learning needs are compromised during their clinical placements.]

**Shortage of qualified staff.** This was given by 69 (60.5%) respondents and was clear from responses such as:
• There is staff shortage in the wards
• The nurse-patient ratio in the wards is high and prevents the teaching and learning of student nurses
• There are inadequate supervisors to supervise/teach student nurses in the clinical areas.

**Poor student allocation.** This was mentioned by 14 (12.3%) respondents and was revealed by responses such as:
• Students allocated to some wards and departments several times
• Sometimes students are not placed in relevant wards after study blocks, for example, theatre before surgery, community before aseptic technique and drug assessments.
• Poor distribution of students
• Sometimes too many junior or senior students in a clinical area.

Students are used to cover for staff shortage. This was stated by 14 (12.3%) out of 114 respondents and was clear from responses such as:
• Students are overworked due to trained staff shortage
• Students have very little time to learn as they are moved from ward to ward.

[Because students are used to do basic nursing work, they are generally too exhausted to study after work.]

Lack of clinical teaching by nurse teachers. This was stated by 7 (6.1%) respondents and was revealed by responses such as:
• Tutors rarely make visits to the clinical area
• Tutors not following up students in the clinical area.

Inadequate resources. This was mentioned by 37 (32.5%) respondents and was revealed by responses such as:
• Inadequate equipment so learning is hindered
• Lack of equipment and material resources for procedures
• There is too much improvisation of equipment as a result students cannot grasp procedures properly.
[This finding suggests that there is a gap between theory and practice which is caused by inadequate resources in the clinical areas.]

**Excessive night duty.** This was mentioned by 7 (6.1%) respondents and was revealed by responses such as:

- Students can go on night duty and do not get a chance to practise skills and study as they are used as part of the workforce
- Get too tired to learn after night duty
- Too much night duty with no teaching

[Although student nurses benefit from working on night duty, this finding suggests that the amount of night duty they do is excessive and that it is not scheduled into their programme.]

**Lack of communication between the school of nursing and clinical area staff.** This was given by 5 (4.3%) respondents and was revealed by responses such as:

- The two do not correlate due to lack of communication between the school and clinical staff.
- It is difficult to know what has been taught in the school
- Student nurses’ objectives not known to ward staff
- No guiding communication of what students are expected to learn
- It is difficult to know the level of students’ knowledge after study block or what study block students move to after clinical placement which makes it difficult for supervisors to assist students.

[This finding suggests that nurse teachers do not inform clinical supervisors about the level which students have attained and what they might
consequently expect of them. This confirms the research findings of Alexander (1983:206), who reported that seventy five percent of ward sisters were not aware of the theoretical content that had been covered by student nurses who were working in their wards.]

Inappropriate duties/tasks given to student nurses. This was mentioned by 1 (0.9%) respondent and was clear from the response:

- Students can be sent as porters and therefore miss teaching and learning

Overcrowding of patients. This was mentioned by 16 (14.0%) respondents and was revealed by responses such as:

- Too many patients
- Outbreak of HIV/AIDS diseases not conducive to learning
- Overcrowding

[This finding suggests that the stress levels of student nurses may be very high because of the presence of a large number of extremely ill patients in overcrowded conditions.]

Lack of student motivation. This was indicated by 7 (6.1%) respondents and was clear from responses such as:

- Students lack commitment hence difficult in accomplishing competencies
- Students relax when in the clinical areas
- There is no continuity in theory input
- Students do not study during clinical placements
• Some students lack motivation because they are not serious with learning, for example, they do not do procedures properly and written case studies have too many spelling and grammar mistakes.

[This finding suggests that student nurses do not study during clinical area placements because they view this time as time to rest from studying.]

The above findings suggest that the learning environment in clinical areas may not be conducive to student learning. Student nurse education is being obstructed by a lack of communication between the school and clinical area staff, the overworking of student nurses, inadequate teaching/supervision, poor student allocation and a lack of clinical teaching by nurse teachers.

**Item 11a: The organization of study blocks**

The aim of this item was to find out whether respondents thought that study blocks were organized in a way that promoted the education of student nurses. Their responses to this item are presented in Table 8.2

**Table 8.2: Clinical supervisors’ perceptions about whether study blocks are organized in a way that facilitates the education of student nurses (n=114)**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>DON'T KNOW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>60</td>
<td>52.6</td>
<td>29</td>
<td>25.4</td>
</tr>
</tbody>
</table>

Table 8.2 shows that the majority of clinical supervisors, namely 60 (52.6%) out of 114 respondents, felt that study blocks were organized in a way that promoted student learning. However, 29 (25.4%) respondents felt
that they were not organized in a way that promoted learning, and 25 (21%) said that they did not know what happens during study blocks. This suggests that there is poor communication between nurse teachers and clinical supervisors. Alexander (1983) found that 33 percent of ward staff actually complained of poor communication between themselves and the nurse teachers.

The 60 (52.6%) out of 114 respondents who felt that study blocks were organized in a way that promoted student learning gave reasons which have been organised into the following categories. These responses are presented in Figure 8.12. The percentage does not add up to 100% because not all respondents gave responses.
Figure 8.12 shows that respondents gave several reasons. These were categorised into the following categories:

- Study blocks are well planned and spaced in such a way that students are given the kind of theoretical knowledge which they are able to put into practice in clinical areas (46 out of 60 respondents: 76.7%).
- The learning environment is conducive to learning because the atmosphere is correct and the necessary facilities are available (1 respondent: 1.7%).
• Because student nurses attend lessons as a group, students in the same group have equal learning opportunities during study blocks (1 respondent: 1.7%).

• Students are taught about conditions that they encounter in the clinical areas. This reinforces their memory of what they were taught (1 respondent: 1.7%).

The 29 (25.4%) out of 114 respondents who felt that study blocks were not organized in a way that promoted the education of student nurses indicated their understanding of the problems inherent in the study block system. Their perceptions are presented in Figure 8.13. The responses do not add up to 100% because not all respondents gave responses.
Figure 8.13: Clinical supervisors' reasons for believing that the organization of study blocks does not promote student teaching and learning (n=29)

Figure 8.13 shows that the following two reasons given by respondents for believing that the organisation of study blocks does not promote student nurse education, are also mentioned and discussed under negative aspects of study blocks:

- Too much content has to be covered in the study blocks (9 out of 29 respondents: 31.0%).
- Because student groups are too large, classrooms cannot accommodate them properly. In such a situation it is also difficult to identify weak
students – and individual student teaching is not possible (8 respondents: 27.6%).

The last reason supplied was:

- Too many study blocks are taking place at the same time and these study blocks overlap each other (4 respondents: 13.8%). This finding suggests that nurse teachers are occupied with planning, teaching and marking in the school of nursing. This confirms Searle’s (1982:53) finding that because such a huge amount of theory has to be covered in some study blocks, nurse teachers have no time left over to keep up to date in their field of knowledge or obtain any kind of practical experience in the subject they are teaching.

**Item 11b: Organization of clinical area placements**

The aim of this item was to identify whether respondents thought that clinical area placements were organized in such a way that they promoted the teaching and learning of student nurses. The responses are presented in Table 8.3

**Table 8.3: Clinical supervisors’ opinions about whether clinical area placements are organized in a way that they promote the teaching and learning of student nurses (n=110)**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
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<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>51</td>
<td>46.4</td>
<td>59</td>
</tr>
</tbody>
</table>

The majority, namely 59 (53.6%) out of 110 respondents, felt that the clinical area placements were not organized in a way that promotes student
nurse learning. However, 51 (46.4%) respondents felt that clinical area placements were organized in a way that *did* promote student nurse learning. This finding suggests that clinical area placements are not efficiently planned and that this may be the cause of a poor integration of theory with practice. Lumby (1989) found that a poor integration of theory and practice causes poor learning and an inadequate recall or retention of knowledge by student nurses.

The 51 out of 110 respondents who felt that clinical area placements *were* organized to promote teaching and learning were asked to explain why they felt that the organisation of clinical area placements promoted student nurse education. The responses are presented on Figure 8.13. The percentages add up to more than 100% because some respondents gave more than one response.
Figure 8.14: Clinical supervisors’ opinions about how the organization of clinical area placements promoted student teaching and learning (n=51)

Figure 8.14 shows that the respondents provided three main reasons. However, the following two reasons were also mentioned (they were also discussed under positive aspects of clinical area placements).

- An integration of theory and practice takes place because students are allocated to clinical areas for which they have already been taught the theory. In such circumstances students can apply the theory they have learnt in study blocks (42 out of 11 respondents: 90.2%).
• Clinical experience is supervised by qualified staff and doctors (16 respondents: 31.4%).

The last reason given was:

• Clinical area placements are well organized because they are well planned (3 respondents: 5.8%).

The 59 (53.6%) out of 110 respondents who felt that clinical area placements were not organized in a way that promoted student teaching and learning were asked to give their reasons. Their responses are presented in Figure 8.15. The responses add up to more than 100% because some respondents gave more than one response.

Figure 8.15: Reasons why some clinical supervisors felt that clinical area placements were not well organized (n=59)
Figure 8.15 shows that some respondents gave several reasons that have already been mentioned under “negative aspects”. These were as follows:

- The clinical placement of student nurses to clinical areas was inappropriate because it was made before students had covered the relevant theory (for example, being placed in theatre before covering the content of surgery, and being placed in community health before doing aseptic and drug assessments (25 out of 59 respondents: 42.4%).
- A shortage of supervisors meant that student nurses were not properly guided and supervised (22 respondents: 37.3%).
- Student nurses work too hard because they are regarded primarily as workers in the wards. They are therefore too exhausted to study after work (15 respondents: 25.4%).
- Because resources in the clinical areas are inadequate, student nurses cannot grasp procedures properly because they have to improvise with equipment (4 respondents: 6.8%).
- Because nurse teachers communicate inadequately with ward staff, the ward staff have no idea of what students have studied during study blocks. This makes it extremely difficult for supervisors to teach students what they need to know (2:3.4%).

**Item 12: Extent of the use of listed teaching methods**

This item aimed to find out the extent to which clinical supervisors used listed teaching methods during student clinical placements. Although respondents used a four-point rating scale, the scale was collapsed into the two ratings of “often to always” and “seldom to never”. The findings are presented in figure 8.16. The maximum number of respondents was 114. Some of the respondents, however, did not give responses to all the listed teaching methods – as is shown in Figure 8.16.
Figure 8.16 Clinical supervisors’ estimations of the extent to which the listed teaching methods were used in their wards/clinical areas

Figure 8.16 illustrates that, the most commonly used methods were bedside teaching (91 or 83.5% out of 109 respondents), ward rounds (80 or 72.7% out of 110 respondents), and student-led discussions (80 or 72.7% out of 110 respondents). The least commonly used listed methods were seminars (13 or 11.4%, out of 114 respondents), and tutorials (49 or 44.5%, out of 110 respondents). These findings suggest that various teaching methods are used to assist students to integrate theory and practice. According to WHO (1991), the integration of theory with practice can be helped or hindered by the teaching and learning strategies that are used.
Seminars
Only 13 (11.4%) out of 114 respondents “often to always” used this method of teaching, whilst the majority (99 or 86.8%) “seldom to never” used it. This finding was expected.

Student-led discussions
The majority (80 or 72.1% out of 111 respondents) felt that student-led discussions were “often to always” used as a method of assisting students to learn. Only 31 (27.9%) respondents said this method was “seldom to never” used.

Lectures
The majority (69 or 61.6% out of 112 respondents) felt that they “often to always” used lectures during clinical area teaching of students. Forty three (38%) respondents “seldom to never” used them.

Bedside/clinical teaching
The majority, namely 91 (83.5%) out of 109 respondents, felt that this method of assisting students to learn was “often to always” used. Only 18 (16.5%) respondents said it was “seldom to never” used in facilitating student learning.

Ward rounds
The majority, namely 80 (72.7%) out of 110 respondents, “often to always” used ward rounds as a method to facilitate student learning, while only 30 (27.3%) respondents felt that they “seldom to never” used this method.
Tutorials
Only 49 (44.5%) out of 110 respondents felt that this method of assisting student nurses to learn was “often to always” used while the majority, namely 61 (55.5%) respondents, felt that it was “seldom to never” used. This finding suggests that tutorials are not much used to teach student nurses during their clinical area placements.

The other methods which respondents cited as “often to always” used were demonstrations and return demonstrations (18: 15.8% out of 114 respondents), case presentations (2 respondents: 1.7%), case studies (1 respondent: 0.9%) and role modelling (1 respondent: 0.9%).

Item 13: Clinical teaching/supervision of student nurses during clinical area placements
The aim of this item was to get respondents to identify the grade of cadres who teach/supervise student nurses during clinical area placements. The responses are presented in Figure 8.17.
Figure 8.17: Clinical supervisors' identification of the grade of cadres who teach/supervise student nurses during their time in clinical placements (N=114)

Figure 8.17 shows that the cadres who teach/supervise student nurses (in order of descending frequency out of 114 respondents) are junior sisters (69 or 60.5%), senior sisters (62 or 54.4%), and sisters-in charge (50 or 43.9%). The nurse teachers, district nursing officers (matrons) and doctors rarely taught or supervised student nurses. These findings are
similar to those identified by the research of Crotty and Butterworth (1992). They noted that when the ward is busy, student nurse teaching and learning suffers or is delegated to the most junior qualified nurses or to other students.

**Item 14: Theoretical background for clinical area responsibilities**

The aim of this item was to find out from the respondents whether student nurses have a theoretical background which is commensurate with their responsibilities during clinical area placements. Their responses are presented in Table 8.4.

**Table 8.4: Clinical supervisors’ opinions about whether student nurses had a theoretical background commensurate with their responsibilities during clinical area placements (n=114)**

<table>
<thead>
<tr>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>TOTAL</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>114</td>
<td>100</td>
</tr>
<tr>
<td>60</td>
<td>52.6</td>
<td>54</td>
<td>47.4</td>
<td>114</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 8.4 shows that the majority, namely 60 (52.6%) out of 114 respondents, felt that student nurses had a theoretical background commensurate with their responsibilities during their clinical area placements. However, 54 (47.4%) respondents felt that they did not have an adequate theoretical background. This finding suggests that, in general, student nurses are allocated to clinical areas for which some relevant content (especially psychomotor skills) will have been covered in study blocks.
The 60 (52.6%) respondents who felt that student nurses did have a theoretical background commensurate with the responsibilities they had to cope with in clinical placements, were asked to give reasons for their opinions.

The respondents gave two reasons.

- It can be seen from the way that student nurses perform procedures that they are able to apply theory in practice (53 out of 60 respondents: 88.3%).
- Student nurses are motivated because they try their best (7 respondents: 11.7%).

The 54 (47.4%) out of 114 respondents who felt that student nurses do not have the necessary theoretical background for their responsibilities in clinical area placements, indicated what they felt was lacking. These responses are presented in Figure 8.18. The responses do not add up to 100% because some respondents did not give responses.
Students lack knowledge and skills

Placements not done according to content

Inappropriate duty allocation

Theory-Practice gap

Students lack motivation

Inadequate communication from the school

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>59.2%</td>
</tr>
<tr>
<td>12.9%</td>
</tr>
<tr>
<td>11.1%</td>
</tr>
<tr>
<td>7.7%</td>
</tr>
<tr>
<td>5.5%</td>
</tr>
<tr>
<td>3.9%</td>
</tr>
</tbody>
</table>

Figure 8.18: Clinical supervisors’ opinions about what student nurses lacked as they attempted to cope with their clinical responsibilities (n=54)

Figure 8.18 shows that respondents gave several responses. Five of these responses were also mentioned and discussed under negative aspects of study blocks. These are as follows:

- Placements were not carried out in accordance with what student nurses had already learnt in study blocks, and some of the content which was being taught, was being taught too early (7 out of 54 respondents: 12.9%).
- Duty allocation is inappropriate because students are sometimes given responsibility for more senior duties: their duties are not allocated in accordance with their level of training (6 respondents: 11.1%).

- Because (1) students are not given opportunities to practise what they are taught (because of staff shortages), and (2) students are taught too much content to link and practice, and (3) nurse teachers do not discuss assignments with their students, there is often a wide gap between theory and practice (4 respondents: 7.7%).

- It is evident that some students lack motivation and that they are not serious about their learning during clinical placements because their written case studies contain too many spelling and grammar mistakes and because they do not perform procedures properly (3 respondents: 5.5%).

- Communication between the school and clinical area staff is inadequate because what is expected of students in clinical areas is not communicated to clinical area staff (1 respondent: 1.9%).

The other reason which was given was:

- Student nurses lack knowledge and skills because they are always deficient in knowledge and because they lack confidence in their work (32 respondents: 59.2%). This finding suggests that student nurses are allocated to clinical areas before they have covered relevant theory and skills.
Item 15: Assistance given to student nurses during the process of linking theory and nursing practice

This item aimed to find out from the respondents whether student nurses were assisted to link theory and practice during clinical area placements. The responses are presented in Table 8.5.

Table 8.5: Clinical supervisors’ opinions about whether student nurses were assisted to link theory and nursing practice (n=114)

<table>
<thead>
<tr>
<th>YES</th>
<th></th>
<th>NO</th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>102</td>
<td>89.5</td>
<td>12</td>
<td>10.5</td>
<td>114</td>
</tr>
</tbody>
</table>

Table 8.5 shows that the majority, namely 102 (89.5%) out of the 114 respondents, agreed that student nurses were assisted to link theory and practice during their clinical area placements. Only 12 (10.5%) respondents felt that students were not assisted to link theory and practice. This finding suggests that clinical teaching is done in the clinical areas.

The 102 (89.5%) respondents who gave a positive answer were asked to indicate what was done. Their responses are indicated in Figure 8.19. The responses add up to more than 100% because some respondents gave more than one response.
Facilitation of learning/supervision/teaching by qualified staff

Learning by experience

Clinical homework and feedback

Evaluation by practical assessments

Discussing with students the objectives to be achieved during placements

Figure 8.19: Clinical supervisors' opinions about what is done to link theory and practice (n=102)

Figure 8.19 shows that respondents gave several responses about what was done to link theory and practice.

- Learning/teaching is done by clinical instructors, ward sisters, doctors and physiotherapists (57 out of 102 respondents: 55.9%).
• Learning from experience takes place when student nurses participate in ward activities such as procedures, doctors’ rounds and other skill-developing nursing care activities (43 respondents: 42.2%).

• Student nurses are given homework and feedback when, for example, they write case studies, do case presentations, take part in group discussions, and write assignments that are related to patients’ conditions in the ward (24 respondents: 23.5%).

• Student nurses are evaluated in terms of their practical assessments (13 respondents: 12.7%).

• The objectives to be achieved during clinical area placements are discussed with student nurses (4 respondents: 3.9%).

The 12 (10.5%) out of 102 respondents who felt that students are not assisted to link theory and practice were asked to give their reasons. These responses are presented in Figure 8.20. The responses do not add up to 100% because some respondents did not give responses.
Figure 8.20: Clinical supervisors' reasons for believing that student nurses were not assisted to link theory and practice during clinical area placements (n=12)

Figure 8.20 shows that respondents gave several reasons for believing that student nurses were not assisted to link theory and practice. These reasons were also mentioned and discussed in item 10 under negative aspects of clinical area placements.

- There are an inadequate number of clinical supervisors to assist students to link theory and practice (4 out of 12 respondents: 33.3%).
- Clinical placements of students are not carried out in accordance with the theory that has been covered in study blocks (2 respondents: 20.0%).
- Nurse teachers do not provide information about what students have been taught and what they are expected to learn (1 respondent: 8.3%).
Even though there are inadequate resources in the wards, students are not taught how to improvise under such circumstances (1 respondent: 8.3%).

Item 16: Provisions for individual student learning

The aim of this item was to find out whether the respondents make provisions for individual student learning either by themselves or their colleagues during clinical placements. The responses are presented in Table 8.6.

Table 8.6: Clinical supervisors' opinions about whether they made provisions for individual student learning during clinical placements (n=112)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>103</td>
<td>92.0</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>112</td>
</tr>
</tbody>
</table>

The majority, namely 103 (92%) out of 112 respondents, felt that they make provisions for individual student learning. A small minority 9 (8.0%), however, said that they do not make provisions for student learning. This finding suggests that some provision is made by some clinical supervisors to encourage student nurses to engage in individual study.

The respondents who gave an affirmative answer were asked to indicate what provisions they make. These findings are presented in Figure 8.21. The responses add up to more than 100% because some respondents gave more than one response.
Figure 8.21: Clinical supervisors’ responses about the provisions they make to encourage students to do individual study (n=103)

Figure 8.21 illustrates that respondents mentioned several of the provisions they make to encourage student nurses to carry out individual study.

- Student nurses obtain clinical experience from the supervision they receive, from bedside teaching and from the opportunities they have when they perform procedures (55 out of 103 respondents: 53.4%).
- Pre-assessment follow ups and assessments (16 respondents: 15.5%).
- Encourage/liase with ward sisters in the clinical areas to give students time to study (8 respondents: 7.8%).
• Provide necessary resources (such as the equipment and materials that are used in the wards) so that student nurses can learn procedures (7 respondents: 6.8%).

• Provide reference materials such as, for example, posters, pamphlets, literature and handouts, in clinical areas (5 respondents: 4.9%).

• Give students some homework (12 respondents: 11.7%). Giving students homework motivates students to learn. Such homework should, however, be planned and given to all students.

The above findings suggest that student nurses are taught and assisted to learn during clinical area placements by clinical supervisors. Clinical experiences is part of the training programme. These findings also suggest that homework is sometimes given. But since homework is not compulsory, some student nurses will benefit while others will not.

The 9 (8%) out of 112 respondents who felt that they do not make provision to encourage student nurses to do individual learning, were asked to give the reasons for their belief. Their responses are presented in Figure 8.22. The responses do not add up to 100% because some respondents did not give responses.
Figure 8.22: Clinical supervisors’ reasons for believing that they do not make provisions for individual student learning (n=9)

Figure 8.22 shows that the respondents who felt that they do not make provision for students’ learning gave the following reasons:

- Because there is a shortage of qualified staff in the wards and (consequently) too much work to be done, there is no time for student teaching (4 out of 9 respondents: 44.4%).
- There are too many students and they are all at different levels (1 respondent: 11.1%).
- Little/minimal teaching goes on in the clinical areas (1 respondent).
• There is a form which has student objectives which clinical supervisors use (1 respondent: 11.1%).

• Because students are mainly used for errands, it is difficult to make provision for their teaching and learning (1 respondent: 11.1%).

These findings suggest that there are no compulsory assignments which encourage student nurses to engage in individual learning or study.

Item 17: Preparation for the teaching/supervision of student nurses

The aim of this item was to find out from the respondents whether they were adequately prepared to supervise/teach student nurses. The responses are presented in Table 8.7.

Table 8.7: Clinical supervisors' opinions about whether they were adequately prepared to supervise/teach student nurses (n=114)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>76</td>
<td>66.7</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 8.7 shows that the majority, namely 76 (66.7%) out of 114 respondents, felt that they were adequately prepared to supervise/teach student nurses. Only 38 (33.3%) respondents felt that they were not adequately prepared. These findings suggest that clinical supervisors are generally speaking adequately prepared for their teaching/supervisory role – but that this is not true for every supervisor.
The respondents were asked to explain how they had been prepared to supervise/teach student nurses. Their responses are presented in Figure 8.23. The responses add up to more than 100% because some respondents gave more than one response.

Figure 8.23: Clinical supervisors’ explanations about how they were prepared for the teaching/supervision of student nurses (n=114)
Figure 8.23 shows that the 76 (66.7%) out of 114 respondents who felt they had been adequately prepared to supervise/teach student nurses, listed the following factors which they felt had prepared them for this role.

- The in-service training courses such as the clinical assessor's course and ward management course prepared them to teach/supervise student nurses (35 out of 76 respondents: 46.0%).
- The orientation which they received as a consequence of being attached to the school of nursing and attending demonstrations of practical procedures (19 respondents: 25%).
- Their work experience (9 respondents: 11.6%).
- Their use of library books (9 respondents: 11.6%).
- Their training as nurse teachers (4 respondents: 5.3%).
- Their use of the procedure manual (3 respondents: 3.9%)
- Their attendance at meetings in which they were informed about curriculum requirements (3 respondents: 3.9%).

The 38 (33.3%) out of 114 respondents who felt that they were not adequately prepared were asked to suggest what they would have liked to prepare them for their role. These findings are presented in Figure 8.24. The responses do not add up to 100% because some respondents did not give responses.
Figure 8.24: Clinical supervisors’ suggestions about what they would have wanted to prepare them for their teaching/supervisory role

Figure 8.24 shows that respondents gave four suggestions about what they would have wanted to prepare them for their role.

- A training course (such as a three to six months clinical assessor’s course) designed to prepare supervisors for supervising and teaching student nurses (12 out of 38 respondents: 31.5%).
- Frequent in-service courses and study days (7 respondents: 18.4%).
- Clinical meetings between nurse teachers and clinical supervisors (especially in the districts) to discuss pertinent problems (3 respondents: 7.9%).
- An updated procedure manual (1 respondent: 2.6%).

The findings suggest that although the majority of clinical supervisors are prepared for their teaching/supervisory role, some feel that they are not. The implication of this is that the proper training and preparation of all clinical supervisors should be mandatory. Osborne (1991:28) noted that the nurse teacher acts as a source of information for both students and clinical staff. This would include supporting and encouraging clinical supervisors to recognise their role as facilitators of student learning and creators of learning opportunities for student nurses.

**Item 18: Guidance and support given to clinical supervisors by nurse teachers**

The aim of this item was to find out from respondents whether nurse teachers gave them any guidance and support that helped them to promote the training and education of student nurses under their care during clinical area placements. The responses are presented in Table 8.8.
Table 8.8: Clinical supervisors’ responses with regard to whether nurse teachers help them with the guidance and support they need to promote the training and education of student nurses (n=114)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>59</td>
<td>51.8</td>
<td>55</td>
</tr>
</tbody>
</table>

Table 8.8 shows that the majority, namely 59 (51.8%) out of 114 respondents, felt that they received guidance and support from nurse teachers which helped them to promote the teaching and learning of student nurses. However, 55 (48.2%) respondents felt that guidance and support was not given.

The 59 (51.8%) out of 114 respondents who felt that guidance and support was given were asked to state what was done. The responses are presented in Figure 8.25. The responses add up to more than 100% because some respondents gave more than one response.
Figure 8.25: Clinical supervisors' descriptions of the guidance and support given to them by nurse teachers (n=59)

Figure 8.25 shows that respondents cited several ways in which they were guided and supported by nurse teachers. These are categorised below.

- Nurse teachers conducted in-service training courses such as the clinical assessor's course (22 out of 59 respondents: 37.3%).
- Nurse teachers come to the wards to carry out clinical teaching (18 respondents: 30.5%).
- Nurse teachers monitor the performance of students and write progress reports (17 respondents: 28.8%).
- Nurse teachers assist if clinical supervisors have problems (9 respondents: 15.3%).
- Nurse teachers inform clinical supervisors of the objectives that students are expected to accomplish (8 respondents: 13.6%).
- Nurse teachers organised the production of procedure manuals and procedure committee meetings are held (6 respondents: 10.2%).

The 55 (48.2%) out of 114 respondents who felt that guidance and support was not given were asked to substantiate their negative responses. The responses are presented in Figure 8.26. The responses do not add up to 100% because some respondents did not give responses.

![Figure 8.26: Clinical supervisors’ reasons for believing that nurse teachers do not give them guidance and support (n=55)](image-url)
Figure 8.26 shows that two of the reasons given by the 55 (48.2%) out of 114 respondents who said nurse teachers do not give guidance and support to clinical supervisors are also mentioned and discussed under Item 10 (the negative aspects of clinical area placements).

- Nurse teachers do not get involved in clinical areas (25 respondents: 45.5%).
- The communication between the school of nursing and clinical area staff is poor. Thus, for example, clinical area staff felt that they were not informed about current issues, that nurse teachers do not communicate to them what they expected student nurses to achieve, and that there were no meetings (13 respondents: 23.6%).

The other reason which was given is that:
- The procedure manual is outdated (1 respondent: 1.8%).

This finding suggests that although nurse teachers do give some degree of guidance and support to clinical supervisors, this guidance and support is sometimes inadequate. This supports the research findings of Bendall (1975) and Alexander (1983: 143-208), who noted that most of the teaching about nursing was given by ward sisters.

**Item 19: Communication between the school of nursing staff (nurse teachers) and clinical supervisors**

This item asked the respondents to rate the communication between nurse teachers and clinical supervisors. A three-point scale was used which permitted the choice of "good", "satisfactory" and "poor". The responses are presented in Figure 8.27.
Figure 8.27: Distribution of clinical supervisors’ responses which rated the communication between the school of nursing and clinical supervisors (n=112)

It is evident from Figure 8.27 that although 19 (17%) out of 112 respondents felt that communication between nurse teachers and clinical supervisors was good, a considerable number (40: 35.7%) of respondents felt that it was satisfactory. The majority 59 (52.7%) felt that the communication was satisfactory to good. A considerable number (53: 47.3%) of respondents felt that the communication was poor. In general the findings suggest that the communication between the school of nursing and clinical area staff is satisfactory. There is clearly, however, a need to improve it.
The 59 respondents who felt that the communication between nurse teachers (school) and clinical area supervisors was “good to satisfactory” gave several responses to justify their answers. These reasons are presented in Figure 8.28. The responses do not add up to 100% because some respondents did not give responses.

Figure 8.28: Clinical supervisors’ justifications for rating communication between nurse teachers and clinical supervisors positively (n=59)

- Communication takes place before students are assigned to clinical areas (9 out of 59 respondents: 15.3%).
- Meetings are held between the school and clinical area staff (6 respondents: 10.2%).
• The school and clinical area staff work together on a daily basis (4 respondents: 6.8%).
• Monitoring of student nurses’ progress (3 respondents: 5.1%).
• Students bring their objectives to the wards (1 respondent: 1.6%).

The 53 (47.3%) out of 112 respondents who felt that communication between the school and clinical supervisors was poor, were asked to give their reasons for believing this. The findings are presented in Figure 8.29. The responses add up to more than 100% because some respondents gave more than one response.

Figure 8.29: Clinical supervisors’ justifications for rating communication between nurse teachers and clinical supervisors negatively (n=53)
Figure 8.29 shows that respondents gave several reasons. Two of the reasons which they gave are also mentioned under negative aspects of clinical area placements in Item 10. These two reasons are:

- There is a lack of involvement among nurse teachers in the clinical teaching of students during their clinical area placements (18 out of 53 respondents: 34.0%).
- Poor relationships prevail between the school and clinical area staff who were said to blame each other in meetings. The school staff were said to think that they were superior and were characterised as not trusting the clinical supervisors (12 respondents: 26.4%).

The other reasons which were given were as follows:

- There were no meetings between the school and the clinical areas (19 respondents: 35.8%).
- Communication only takes place with clinical instructors and not directly with nurse teachers. Clinical instructors were said to lead the clinical area teaching (3 respondents: 5.7%).
- Sisters are given the student nurses' change lists at the last minute (3 respondents: 5.7%).
- School staff are only seen when there are student nurses' assessments on the wards (1 respondent: 1.9%).

**Item 20: Suggestions as to how the block system could be improved**

The aim of this item was to elicit suggestions from the respondents as to how study blocks and clinical area placements could be improved so that the teaching and learning of student nurses might be improved.
The responses regarding suggestions to improve study blocks are presented in Figures 8.30. The responses do not add up to 100% because some respondents did not give responses.

Figure 8.30: Clinical supervisors' suggestions about how to improve the teaching and learning of student nurses during study blocks (n=114)

Figure 8.30 illustrates that respondents gave several responses about how to improve the teaching and learning of student nurses during study blocks.

Study blocks should be lengthened so that nurse teachers have sufficient time to demonstrate how to integrate theory and practice
during ward visits with students. This was mentioned by 19 (16.7%) out of 114 respondents and was revealed by responses such as:

- Increase the number of weeks in study blocks so that the tutor can take students to clinical area to reinforce what is taught.
- There is a need for students to practice what they were taught immediately after theory input.
- Nurse teachers should take students to wards during study blocks for them to see patients with conditions.
- Time should be allocated for clinical teaching activities in the wards during study blocks.

The number of nurse teachers should be increased. This was mentioned by 8 (7.0%) respondents and was indicated by responses such as:

- Increase the number of tutors so that they can carry out clinical teaching and follow ups.
- There is a need for more tutors.

Students should be motivated. This was indicated by 8 (7.0%) respondents and was revealed by responses such as:

- Need to motivate students to learn
- Recruit students who have interest in the field
- Students need to be more disciplined to do their work.

There is a need for nurse teachers to be involved in teaching students in the clinical areas. This was mentioned by 7 (6.1%) respondents and was revealed by responses such as:

- Nurse teachers should follow up students in wards.
The length, amount of content and frequency of study blocks needs to be critically evaluated. This was mentioned by 5 (4.4%) respondents and was revealed by responses such as:

- Need to look into the information covered during study blocks
- Need to look into the length and frequency of study blocks.

There should be a reduction in the number of intakes. This was mentioned by 5 (4.4%) respondents and was clear from responses such as:

- Reduce intakes from 3 to 2

Study blocks should prepare students for clinical area placements. This was mentioned by 5 (4.4%) respondents and was revealed by responses such as:

- Block content should prepare students for clinical experience
- Student placement should be complimented [sic] by relevant theory

The amount of time spent on study blocks should be decreased. This was mentioned by 2 (1.8%) respondents and was revealed by responses such as:

- Time spent in study blocks should be shortened

Other suggestions were:

- Need to organise regular in-service courses for clinical supervisors (3 respondents: 2.6%).
- The school and clinical area staff should work as a team (2 respondents: 1.8%).
The responses regarding suggestions to improve clinical area placements are presented in Figure 8.31. The responses add up to more than 100% because some respondents gave more than one response.

Figure 8.31: Clinical supervisors’ suggestions about how to improve the teaching and learning of student nurses during clinical area placements (n=114)

Figure 8.31 shows that the following suggestions were made about how the teaching and learning of student nurses could be improved during clinical area placements:
By increasing the number of qualified nurses in the clinical areas. This was indicated by 57 (50.0%) out of 114 respondents and was revealed by responses such as:

- Recruitment of more trained staff
- Nurse-patient ratio must be reviewed in order to staff wards adequately.
- Increase manpower to districts which receive students.
- Increase all supervisors in order to carry out clinical teaching

By providing adequate resources. This was mentioned by 24 (21.1%) respondents and was revealed by responses such as:

- Purchase of adequate equipment and material resources for staff to perform and teach efficiently
- Adequate resources should be provided in the clinical areas to teach students

By getting nurse teachers to teach students in the clinical areas. This was mentioned by 16 (14%) respondents and was revealed by responses such as:

- The nurse teachers should follow up students in the clinical area so that students feel supported
- Plan follow ups to districts by tutors.
- Nurse teachers should carry out clinical teaching

By giving students supernumerary status. This was indicated by 13 (11.4%) respondents and was revealed by responses such as:

- Give students time for training and stop using them as a pair of hands.
- Need to treat students like any other students
- Students should always be given student status.
By placing students to clinical areas in accordance with the content covered in study blocks. This was mentioned by 10 (8.8%) respondents and was revealed by responses such as:

- Student nurses should be placed in the right area at the right time.
- Improve coordination from study block and clinical area placement.

By holding regular meetings between the school and clinical supervisors. This was mentioned by 10 (8.8%) respondents and was clear from responses such as:

- There should be regular communication between nurse teachers and clinical staff
- Sisters should be informed [about] what students have covered and what they are expected to accomplish during the respective placements.

By increasing the length of time that student nurses spend in clinical area placements. This was mentioned by 8 (7.0%) respondents and was revealed by responses such as:

- Period of placement in the clinical area should be increased so that students have enough time to apply theory to practice.
- Student placements to a clinical area should be a minimum of 4 weeks

By decreasing the length of periods of placements spent in psychiatry and obstetrics so as to increase the length of time spent in ward placements. This was mentioned by 7 (6.1%) respondents and was clear from responses such as:

- Shorten the period of clinical placements to psychiatry and maternity and let students spend more time in the wards.
By strengthening student supervision. This was mentioned by 4 (3.5%) respondents and was revealed by responses such as:

- Need for more supervision during clinical area placements
- Supervision and support in clinical areas should be strengthened.

By increasing the amount of clinical teaching sessions given by clinical instructors. This was indicated by 10 (8.8%) respondents and was revealed by responses such as:

- Clinical instructors should make frequent follow-ups on students even when there are no assessments being carried out
- Increase the number of clinical instructors so that there is one in every ward or for two wards.
- There is a need for more planned clinical teaching sessions by clinical instructors.

By providing reference books and procedure manuals. This was indicated by 4 (3.5%) respondents and was revealed by responses such as:

- Library facilities for clinical area personnel for them to be informed
- There should be well equipped libraries for community nurses.

By adequately preparing ward sisters and clinical instructors. This was mentioned by 5 (4.4%) respondents and was revealed by responses such as:

- Adequate preparation of clinical instructors and ward managers/sisters to teach.
- Workshops to inform personnel in the clinical areas on new trends.
- Constant refresher courses
• Opportunity should be provided for every trained nurse to attend the
clinical assessor's course to equip him/her with teaching and assessing
skills

Other suggestions that were made included the following:
• Two (1.8%) respondents felt that time should be provided for learning
during clinical area placements in the school of nursing.
• Three (2.6%) respondents felt that transport should be provided for
student community experience and follow up by tutors.
• Two (1.8%) respondents felt that there should be electricity in
accommodation used for student community experience.
• Two (1.8%) respondents felt that night duty for student nurses should be
limited.

These findings suggest that there are several aspects of the block system
which could be improved so that the quality of student nurse education
could in turn be improved.

8.3 SUMMARY
The majority of clinical supervisors were mature people over the age of 30
with over six years experience, both as professional nurses and clinical
supervisors. Most of the clinical supervisors were female and all of them
possessed general nursing and midwifery diplomas. A considerable number
of them also possessed other post-registration clinical courses.

Although most of the clinical supervisors understood the meaning of the
block system, there were many who did not understand it. The respondents
identified several positive aspects of study blocks such as availability of
time for student learning, facilitation of student learning by nurse teachers and attending lessons as a group. Several negative aspects of study blocks were also identified such as inadequate teaching/learning resources and nurse teachers as well as classes that were far too large. The positive aspects of clinical area placements which were identified by respondents included student nurses’ opportunities for integrating theory with practice, supervision and teaching by clinical supervisors and the provision of educational information by nurse teachers to clinical supervisors through the medium of in-service courses and procedure committee meetings. Many negative aspects of clinical area placements were identified such as the inadequate supervision/teaching of student nurses, the overworking of student nurses and a shortage of qualified staff in the clinical areas.

Although the majority of respondents felt that study blocks were organized to promote student nurse teaching and learning, most of them felt that the clinical area placements were not. The respondents identified the people who supervise and teach student nurses most frequently during clinical area placements as being junior sisters and senior sisters. The most frequently used teaching methods during clinical area placements were identified as being clinical teaching/bedside teaching, ward rounds and student-led discussions. While respondents felt that student nurses had an adequate theoretical background for clinical responsibilities, they also felt that provisions needed to be made for student nurses to do individual study. Most respondents felt that they were adequately prepared for their supervisory and teaching role and that they were also being given adequate guidance and support by nurse teachers to assist them with the teaching of the student nurses.
Communication between nurse teachers and clinical supervisors was judged to be "satisfactory to good" by most respondents. The suggestions which were made to improve study blocks included the lengthening of study blocks, the involvement of nurse teachers in clinical teaching and increasing the number of nurse teachers. Several suggestions were made to improve clinical area placements. These suggestions included the provision of an adequate number of qualified staff, adequate resources and supernumerary student status.

A comparison of student nurses’, nurse teachers’, and clinical supervisors’, perceptions with regard to some aspects of the block system will be presented in the next chapter.
CHAPTER 9

PERCEPTIONS OF STUDENT NURSES, NURSE TEACHERS AND CLINICAL SUPERVISORS

9.1 INTRODUCTION

In this chapter, the opinions and perceptions of student nurses, nurse teachers and clinical supervisors are compared with regard to several relevant items. These comparisons enable the researcher to present a comparative overview of their perceptions of the block system.

The findings are presented in graphs which detail the percentage distribution of the responses of the student nurses, nurse teachers and clinical supervisors. Each set of comparisons is interpreted and discussed in turn, and the relevant literature is also cited where appropriate.

9.2 Comparison of questionnaire findings

Item 1: The meaning of the block system

The aim of this item was to compare the ways in which the student nurses, nurse teachers and clinical supervisors understood the meaning of the block system. Their responses are presented in Figure 9.1.
Figure 9.1: Percentage distribution of student nurses', nurse teachers' and clinical supervisors' responses with regard to their understanding of what the block system means.

Figure 9.1 shows that the majority of nurse teachers (31: 77.5%) out of 40 respondents and clinical supervisors (65: 59.1%) out of 114 respondents understood the meaning of the block system. However, the majority of student nurses (223: 73.6%) out of 303 respondents and a considerable percentage of clinical supervisors did not understand what the block system meant.
These findings suggest that whereas the nurse teachers understand the block system which they use for educating the student nurses, the majority of student nurses and a considerable number of clinical supervisors do not understand what the block system means. This finding suggests that the nurse teachers came to understand the meaning of the block system during their diploma or degree studies in nursing education. It is therefore important for schools of nursing to make provision, in the introductory course, to provide student nurses with a clear understanding of what the block system of nurse education means, and the various ways in which they will encounter it. The school of nursing should also help all clinical supervisors to acquire a clear understanding of the block system of nurse education that is being used in Zimbabwe so that they can become more effective in implementing their teaching roles. Such an understanding would help all stakeholders to have a clear understanding of what they might expect from the nurse teachers, student nurses and clinical supervisors who operate in the context of the block system.

Item 2a: Organization of study blocks

The aim of this item was to compare the opinions of student nurses, nurse teachers and clinical supervisors about whether study blocks are well organized or not. Their responses are presented in Figure 9.2a.
Figure 9.2a: Percentage distribution of student nurses', nurse teachers' and clinical supervisors' responses with regard to the organization of study blocks

Figure 9.2a shows that the majority of nurse teachers, namely 25 (62.5%) out of 40 respondents, and majority of clinical supervisors, namely 60 (52.6%) out of 114 respondents, felt that study blocks were organized in a way that promoted student nurse teaching and learning. However, just over half of the student nurses, namely 189 (50.8%) out of 372, respondents felt that study blocks were not organized in a way that promoted their learning.
It was also interesting to note that 25 (21%) of the clinical supervisors said that they did not know what happened during study blocks. The earlier analysis of item 9.1 showed that a considerable number of clinical supervisors do not understand what the block system means. This finding suggests that nurse teachers need to educate and orientate student nurses and clinical supervisors about the block system and what its implications are in the practice of nurse education.

The commonest reasons given by student nurses, nurse teachers and clinical supervisors for believing that the study blocks are well organized are that they are well organized and that they provide student nurses with a learning environment that is conducive to the best educational interests of student nurses. In addition to the above, they believed that the theory that student nurses learnt during study blocks prepared them for the clinical responsibilities they would encounter, and that they also learnt enough theory to participate in the practical application of learning in wards (i.e. performing necessary procedures on patients). The latter two reasons, if correct, are certainly in line with Knowles’s andragogical assumptions, namely that adult learners are motivated to learn if they apply what they have just learnt to solve professional problems (Knowles 1980:45) and that adult learners want to be actively involved in their learning (Brundage & Mackeracher 1980:97).

The most common reason cited by the three groups for believing that study blocks were not well organized is that there was too much content in each study block. Because there is too much content, most student nurses simply memorise the content without understanding the subject so that they can pass their examinations. The other reason that was given is that because
there are too many study blocks, nurse teachers cannot follow up students in clinical areas because all their spare time is taken up with planning, teaching and marking tests. This finding is similar to what was noted by Jacka and Lewin (1986:679-680) and Mellish and Brink (1990:103), who stated that study blocks may become periods of cramming for students because of huge amounts of theory that they have to cover within a relatively short period of time.

**Item 2b: Organization of clinical area placements**

The opinions of student nurses, nurse teachers and clinical supervisors about whether clinical area placements are well organized or not well organized are presented in Figure 9.2b.

![Figure 9.2b: Percentage distribution of student nurses', nurse teachers' and clinical supervisors' opinions about the organization of clinical area placements](image)

**Figure 9.2b:** Percentage distribution of student nurses', nurse teachers' and clinical supervisors' opinions about the organization of clinical area placements
Figure 9.2b shows that the majority of nurse teachers, namely 29 (72.5%) out of 40 respondents, and the majority of clinical supervisors, namely 59 (53.6%) out of 110 respondents, felt that the clinical placements were not well enough organized to promote the teaching and learning of student nurses. In addition, exactly half of the student nurses, i.e. 184 (50%) out of 368, felt that there were problems with the organisation of clinical area placements – problems that do not promote the learning of student nurses. Mahat (1998:11) noted that student nurses frequently perceived stressors in the clinical setting. Pagana (1988:418-424), Beck and Srivasta (1997:127) and Lindhop (1991:110-120) all indicate that student nurses designate their time in clinical placements as the most stressful periods of their nurse training.

The main reason cited by the three groups of respondents for feeling that clinical placements were not well organized was because the allocation of student nurses for clinical experience was based on hospital service needs and not on the content which is covered in the study blocks. This prevents a proper integration of theory and practice. This finding is similar to what was reported by Jacka and Lewin (1986:675-685), who found that student nurses were often not placed in relevant clinical areas.

In such situations student nurses may be asked to perform procedures about which they have been taught nothing in their classrooms. This naturally causes a great deal of fear and anxiety – both of which impede proper learning. This finding was also reported by Zweig (1988), cited in Mahat (1998:13), who found that student nurses experience stress when they are placed in new clinical areas for which they are unprepared. The respondents
also cited a shortage of clinical supervisors as the reason why student nurses are not being properly taught or supervised.

The respondents who felt that the clinical areas were well organized believed that some student nurses end up by chance in clinical areas for which they have been theoretically prepared by classroom teaching and demonstrations. This finding suggests that the learning opportunities for student nurses during clinical placements in the block system are based on randomness, accident, chance and luck. This confirms the research findings of Jacka and Lewin (1986:679-685) and of the General Nursing Council Scotland (cited in Alexander 1983:27). The other reason cited is that the clinical placements of student nurses promote their experiential learning and skills development. Quinn (1988:407) observes that most of the teaching and learning strategies in the clinical setting depend upon experiential learning.

**Item 3a: The use of teaching methods during study blocks**

This item compared the perceptions of student nurses and nurse teachers with regard to the extent that specific teaching methods are used during study blocks. (Clinical supervisors were not included here because they are not involved in classroom teaching during study blocks). The responses are presented in Figure 9.3a.
Figure 9.3a: Percentage distribution of responses from student nurses and nurse teachers about the frequency with which the specific teaching methods are used during study blocks.
Figure 9.3a shows that the most commonly used method of teaching during study blocks, in the perception of the majority of student nurses, namely 380 (95.7%) out of 397 respondents, and the majority of nurse teachers, namely 39 (97.5%) out of 40 respondents, is the formal lecture. This is an interesting finding because the use of the formal lecture is directly contrary to the kind of learning methods recommended for adult learners. Andragogy recommends participatory or action learning techniques that afford learners the opportunity to use their personal experience to solve learning problems (Brundage & Mackeracher 1980:97).

The nurse teachers felt that the use of formal lectures is justified because (1) there is simply too much content that has to be covered, (2) groups are too large, and (3) a lot of new information has to be taught within too short a time. This last reason supports the belief of Knowles (1984:13) that didactic teaching methods (such as the formal lecture method) do have a place in the teaching or imparting of new knowledge, skills and attitudes before students are put in the position where they have to use their own initiative. Student nurses were of the opinion that they are the passive recipients of lecture notes and that they do not receive any feedback. This confirms research findings of Harvey and Vaughan (1990:181-185), who found that student nurses disliked lectures and preferred student-centred teaching methods. It has also been noted by Quinn (1995:115) that formal lecture methods are teacher-centred and that in such situations student nurses are forced into being the passive recipients of information provided by the teacher. The other methods cited as being frequently used are tutorials led by tutors, demonstrations and student-led discussions. This is illustrated in figure 9.3a. These are the kind of action learning methods which are recommended by andragogical teaching principles (Brundage & Mackeracher 1980:97).
The least-used methods during study blocks are *ward rounds*, which were seldom to never used by 206 (75.3%) student nurses and 34 (87.2%) nurse teachers, and *role plays*, which were seldom to never used by 301 (80.9%) student nurses and 29 (74.4%) nurse teachers.

**Item 3b: Use of teaching methods during clinical area placements**

This item compared the perceptions of student nurses, nurse teachers and clinical supervisors about the extent of use of specified teaching methods in the clinical areas. Their responses are presented in Figure 9.3b.
Figure 9.3b: Percentage distribution of responses from student nurses, nurse teachers and clinical supervisors about the frequency with which the specified teaching methods are used in clinical areas.
Figure 9.3b shows that the most commonly used method of teaching indicated by the three groups was ward rounds. This was indicated by most of the respondents, namely 256 (65.8%) student nurses out of 389 respondents, 24 (64.9%) nurse teachers out of 37 respondents, and 80 (72.7%) clinical supervisors out of 110 respondents. However, the majority of nurse teachers, namely 31 (81.6%), felt that they most commonly used demonstrations for teaching – while the majority, namely 91 (83.5%) out of 109 clinical supervisors, said they “often to always” used bedside teaching. These methods are used at the patients’/clients’ side and are appropriate for linking theory and practice. This finding is confirmed by White and Ewan (1991:2), who noted that clinical teaching assists student nurses to link theory and practice.

**Item 4: The cadre who teaches/supervises student nurses during clinical area placements**

This item compares the perceptions of student nurses and clinical supervisors with regard to the grade of cadre who supervised/taught student nurses during clinical area placements. Their responses are presented in Figure 9.4.
Figure 9.4: Percentage distribution of student nurses’ and clinical supervisors’ responses with regard to the grade of cadre who supervises/teaches student nurses during clinical area placements

Figure 9.4 shows that the majority of student nurses, namely 284 (70%) out of 406 respondents, and the majority of clinical supervisors, namely 69 (60.5%) out of 114 respondents, rated junior sisters as the health cadre who most commonly assisted student nurses with their learning during clinical area placements. This was followed by senior sisters – who were rated by 264 (65.2%) out of 405 student nurses and 62 (54.4%) out of 114 clinical supervisors as the cadre who next most commonly assisted student nurses. Sisters in charge were rated by 283 (69.7%) out of 406 student nurses as following in the rank order.
These findings suggest that all grades of clinical supervisors play a major role in the clinical education of student nurses. Pembray (1982:20) and Gerrish (1990) also found that the ward sister plays a very important role in assisting student nurses to integrate theory and practice. However, student nurses, namely 335 out of 404 respondents (82.9%) rated their peers (same level students), and senior student nurses, namely 330 out of 403 respondents (81.9%), as the grades of health cadre who helped them most in their learning during clinical area placements.

This finding suggests that peer teaching plays an important role in student learning during clinical placements. This finding confirms research findings of Iwasiw and Goldenberg (1993:659), who found that peer education plays an important role in nursing education. It is interesting to note that student nurses rated nurse teachers on a low scale (135 out of 390 respondents or 34.6%), and that they were rated by clinical supervisors on an even lower scale (3 out of 114 respondents, or 2.6%). The implication of this is that nurse teachers rarely assist student nurses with learning during their clinical placements. This finding is similar to that reported in the research of Schuldam (1988:6) and Reid (1985), who found that the involvement of nurse teachers in clinical education of student nurses was minimal. Alexander (1983:149-208), Fretwell (1982) and Clinton (1985) also found that nurse teachers hardly supervised student nurses at all in the clinical areas. The implications of these findings are that student nurses and clinical staff, especially junior sisters, play an important role in the clinical education of student nurses and that they should be prepared and supported in this role.
Item 5a: Positive aspects of study blocks

This item compared how student nurses, nurse teachers and clinical supervisors perceived the positive features of the study block system. The findings are presented in Figure 9.5a.
Figure 9.5a: Percentage distribution of responses by student nurses, nurse teachers and clinical supervisors with regard to the positive aspects of study blocks

Figure 9.5a shows that the most common positive aspect of study blocks noted by the majority of student nurses, namely 237 (57.1%) out of 415 respondents, and nurse teachers, namely 40 (100%), was that there was enough time for student nurses to acquire knowledge and skills during study blocks. This was also reported by 53 (46.5%) out of 114 clinical supervisors. However, the majority of clinical supervisors 74 (64.9%) felt that the most common positive aspect of the study block system is that it provides student nurses with a environment which is conducive to learning because no clinical work is carried out during study blocks.
This was mentioned by only 16 (40%) of nurse teachers and 58 (13.7%) student nurses. An environment that is conducive to learning promotes the learning opportunities of student nurses. The importance of an environment conducive to learning in classroom teaching has also been noted by Fisher and Parkinson (1998:238). The other positive features of the study block system noted by a high percentage of nurse teachers, namely 29 (72.5%), were that there is integration of theory and practice and that student nurses attended the study blocks as a group. This latter feature provides student nurses with equal learning opportunities, and was noted by 25 respondents (62.5%). If students attend school as a group during study blocks, various arrangements that are beneficial for students can be made. Such arrangements include lectures by outside lecturers, field trips and group student projects (Mellish & Brink 1990:102-103).

The other positive aspects of the study blocks are shown in Figure 9.5a.

Item 5b: Positive aspects of clinical area placements

This item compared the positive aspects of clinical area placements as perceived by student nurses, nurse teachers and clinical supervisors.
Figure 9.5b: Percentage distribution of responses by student nurses, nurse teachers and clinical supervisors with regard to the positive aspects of clinical area placements.

Figure 9.5b illustrates that the most common positive aspect indicated by the majority of student nurses, namely 255 (61.5%) out of 415 respondents; nurse teachers, namely 40 (100%), and clinical supervisors, namely 89 (78.1%) out of 114 respondents, is that integration of theory and practice takes place during clinical area placements. Again, 40 nurse teachers (100%), and only 108 of the student nurses (26%), felt that clinical area placements afforded the student nurses with the opportunity to learn and practise skills on real patients. It is surprising to note that the clinical
supervisors did not mention this positive aspects of clinical placements here.

In spite of this, these findings support what was noted by Quinn (1988:395) when he highlighted the importance of the clinical setting for providing student nurses with opportunities to learn life skills such as being able to work as a member of a health team, decision making, communication and the application of nursing principles to patients' clients' care. All these skills and competencies can only be developed in the clinical setting. Their cultivation is absolutely necessary because they reinforce good professional nursing attitudes towards patients and clients in student nurses. This kind of action learning is recommended by Knowles' theory of andragogy, which states that adult learners are motivated to learn if they can apply their newly acquired knowledge to solve work problems (Knowles 1980:45, Hersh 1984:29-44). The other positive aspects mentioned by 25 (62.5%) of nurse teachers is that the clinical area placements afford student nurses opportunities to acquire appropriate nursing attitudes because they work as a team with all other health workers of various levels.

Item 6a: Negative aspects of study blocks

This item compared the negative aspects of study blocks as these were perceived by student nurses, nurse teachers and clinical supervisors. The findings are presented in Figure 9.6a.
Figure 9.6a: Percentage distribution of responses of clinical supervisors, nurse teachers, and student nurses with regard to the negative aspects of study blocks

Figure 9.6a shows that the commonest negative aspect of the study blocks noted by student nurses, namely 344 (82.9%) out of 415 respondents; nurse teachers, namely 40 (100%), and a small percentage of clinical supervisors, namely 24 (21.1%) out of 114 respondents, was that because there was too much theoretical content in each study block, nurse teachers resorted to using formal lectures to teach – instead of the participatory teaching methods recommended by andragogy. This compelled student nurses to
memorise the content so that they could pass examinations (they might have had no understanding of the content they were being taught).

This finding is similar to that reported by Jacka and Lewin (1986:679-680) and Mellish and Brink (1990:103) who noted that study blocks may become periods of cramming for student nurses because of the large amounts of theory that have to be covered within a short time. Sweeney (1986:256) noted that teacher-centred teaching methods such as the formal lecture do not stimulate critical and analytical thinking in student nurses.

This finding suggests that nurse teachers should also use action teaching/learning methods in order to promote critical and analytical thinking in student nurses. Critical and analytical thinking develop the ability of student nurses to solve problems both during their training and when they have qualified as professional nurses.

The other most common negative aspects cited were inadequate teaching and learning resources and physical facilities (classrooms). These findings suggest that the physical classroom environment is not conducive to student nurse learning. Borich (1988:232) emphasizes that classroom accommodation should be both spacious and comfortable, and that there should be adequate ventilation and heating and a sufficient number of teaching aids for learning to be interesting, enjoyable and optimal. This was noted by 38 (95%) of nurse teachers, 57 (49.2%) of clinical supervisors and 133 (32%) of student nurses.

These negative aspects were aggravated by the recruitment of large groups of student nurses, a fact that was noted by 12 (30%) of nurse teachers and 40 (42.1%) of clinical supervisors. The recruitment of large groups of
student nurses is one of the reasons for the high student nurse-teacher ratio, which was noted by 27 (67.5%) of nurse teachers, 52 (45.6%) of clinical supervisors and 20 (4.8%) of student nurses. The government’s demands for more nurses has increased the size of classes in Zimbabwe and made them unmanageably large. This finding is similar to that of Boman (1986:226) and Crotty (1993:10), who deduced that large classes are caused by the demand for large numbers of well-trained nurses in the absence of adequate financial resources.

**Item 6b: Negative aspects of clinical area placements**

This item compared the negative aspects of clinical area placements as these were perceived by student nurses, nurse teachers and clinical supervisors. Their responses are illustrated in Figure 9.6b.
Figure 9.6b: Percentage distribution of responses by student nurses, nurse teachers and clinical supervisors with regard to the negative aspects of clinical area placements

Figure 9.6b shows that the most commonly noted negative aspect of clinical area placements was the shortage of qualified staff in the clinical areas. This was noted by 40 (100%) nurse teachers, 69 (60.5%) clinical supervisors out of 114 respondents, and 125 (30.1%) student nurses out of 415 respondents. This has two main implications for the learning of student nurses. These are that student nurses are used to cover for staff shortages, as mentioned by 14 (12.3%) of clinical supervisors, and that such a situation causes inadequate supervision/teaching by clinical supervisors.
as mentioned by 14 (12.3%) of clinical supervisors, and that such a situation causes inadequate supervision/teaching by clinical supervisors. The latter opinion was indicated by 94 (22.7%) of student nurses and 82 (71.9%) of clinical supervisors.

Quality supervision is an indispensable factor for consolidating what student nurses have learnt and for the development of their professional identity (Kirkpatrick et al 1991:102). The shortage of qualified staff also means that student nurses must do night duties with minimal teaching/supervision. This was indicated by 19 (4.6%) student nurses and 7 (6.1%) clinical supervisors. These findings suggest that student nurses do not receive adequate opportunities to learn or to be taught. This is contrary to what is recommended by Mellish and Brink (1990:104) when they note that the successful implementation of the block system requires well-staffed clinical areas and a well-staffed school of nursing.

The other main identified negative aspect of the clinical areas was the overworking of student nurses – which was indicated by 26 (65.0%) of nurse teachers, 73 (64%) of clinical supervisors and 188 (45.3%) of student nurses. This finding suggests that student learning is inhibited by a heavy workload in the wards. This conclusion is similar to that of Fretwell (1982:33-35), who found that students in two wards in her study commented on the heavy workload and staff shortages. About one third of the learners in these wards believed that the heavy workload in these two wards left no time for teaching. According to Fretwell (1982:34), a heavy workload is commonly adduced as a reason for inadequate teaching.

Nurse teachers (37: 92.5%), clinical supervisors (37: 32.5%) and student nurses (65: 15.7%) all noted that the clinical areas, especially wards, did
not have enough equipment and resources for student nurses to practise procedures. In most cases, this meant that they had to end up improvising – a procedure that certainly does not promote transfer of what is learnt in the classroom to clinical areas. This finding confirms that a gap exists between what is taught in the classrooms and what is practised in the wards. This runs contrary to what is recommended by Ellis (1965), who found that maximum transfer of learning takes place when the similarity between theory and procedures taught and what happens in the clinical situation are maximised.

One other negative aspect of the clinical area placements which was indicated by both the nurse teachers (15: 37.5%), clinical supervisors (14: 12.3%) and student nurses (31: 7.5%) is that the allocation of student nurses to clinical areas was not based on the content covered during study blocks. This finding is similar to that reported by Jacka and Lewin (1986:675-685), who found that student nurses were often not placed in relevant clinical areas. This also creates a situation in which student nurses are asked to perform procedures which they have not been taught – a situation which, as the researcher noted above, generates extreme levels of anxiety and fear in student nurses. Zweig (1988), cited in Mahat (1998:13), confirms that student nurses experience stress when they are placed in new clinical areas in which they feel incompetent.

**Item 7: How study blocks prepare student nurses for clinical responsibilities**

This item compared the responses of student nurses, nurse teachers and clinical supervisors as to whether student nurses have an adequate theoretical background for the responsibilities they encounter during clinical area placements. The responses are illustrated in Figure 9.7.
Figure 9.7: Percentage distribution of the responses of clinical supervisors, nurse teachers and student nurses with regard to whether student nurses have an adequate theoretical background for their clinical responsibilities.

Figure 9.7 illustrates that the majority of student nurses, namely 323 (82.8%) out of 415 respondents, and the majority of nurse teachers, namely 34 (85.0%) out of 40 respondents, felt that student nurses have adequate theoretical knowledge for coping with the responsibilities they encounter in clinical area placements. Only 60 (52.6%) out of 114 of the clinical supervisors felt that their student nurses had an adequate theoretical background for their clinical responsibilities.
supervisors believed that student nurses possessed an adequate theoretical background for coping with their responsibilities in clinical placement areas. The difference in percentage distribution of responses may be due to the fact that student nurses and nurse teachers base their positive responses on theoretical assessment whereas the clinical supervisors may base their responses on practical observations of how student nurses perform their clinical responsibilities. These findings suggest that integration of theory and practice occurs when student nurses are allocated to areas for which they already possess relevant theoretical knowledge.

Item 8: Linking theory and practice

This item compared the opinions of student nurses and clinical supervisors about whether student nurses were assisted to link theory and practice in clinical area placements. The responses are presented in Figure 9.8a.
Figure 9.8a: Percentage distribution of the opinions of student nurses and clinical supervisors about whether student nurses were assisted to link theory and practice during clinical placements.

Figure 9.8a shows that both the majority of student nurses, namely 281 (76.8%) out of 366 respondents, and the majority of clinical supervisors, namely 102 (89.5%) out of 114 respondents, felt that student nurses were assisted to link theory and practice during clinical area placement. This finding suggests that student nurses learn during clinical area placements.

The activities which are performed to link theory and practice are illustrated in Figure 9.8b.
Figure 9.8b: The responses of student nurses and clinical supervisors about the kind of activities that assist student nurses to link theory and practice during clinical area placements

Figure 9.8b shows that the respondents believe that the commonest activities that assist student nurses to link theory to practice are experiential learning, clinical teaching by qualified staff, and homework with feedback. Out of the two samples, 122 student nurses (43.4%) out of 281 respondents, and 43 clinical supervisors (42.2%) out of 102 respondents, believed that it was the allocation to clinical areas in which student nurses could observe conditions and perform procedures covered during study blocks, that assisted students to link theory and practice. This conforms with one of the
basic assumptions of andragogy (Knowles 1980:45, Hersh 1984:29-44), which states that adults develop a readiness to learn new information, skills and attitudes in order to deal with their immediate social and professional problems.

Of the clinical supervisors, 57 (55.9%), and of the student nurses, 72 (25.6%), believed that bedside/clinical teaching undertaken by qualified clinical staff such as clinical instructors, ward sisters and doctors assisted students to link theory and practice in the clinical areas. This finding agrees with White and Ewan (1991:2), who stated that the purpose of clinical teaching is to assist student nurses to apply their knowledge to the care of patients/clients. The homework, which 51 student nurses (18.1%) and 24 clinical supervisors (23.5%) mentioned, also assists student nurses – especially when it is followed by feedback from the clinical supervisors.

The pre-assessment follow ups and assessments were thought to assist students to link theory and practice by 74 (26.3%) student nurses and 13 (12.7%) clinical supervisors. One of the most important ways of assisting student nurses to link theory and practice, which was mentioned by 28 (7.5%) student nurses, is when students work with either senior student nurses or qualified nursing staff. The linking of theory and practice will then take place in an informal and relaxed atmosphere. This supports the views of Quinn (1980:206) and White and Ewan (1991:7-8), who consider that one of the important roles of the clinical educator (i.e. the clinical instructor and the ward sister) is that of being a role model for student nurses.
Item 9: Provisions made for student nurses to do individual study

The aim of this item was to compare the opinions of student nurses, nurse teachers and clinical supervisors about whether provision was being made for student nurses to do individual study during clinical area placements. The responses are presented in Figure 9.9.

![Figure 9.9: Percentage distribution of the opinions of student nurses, nurse teachers and clinical supervisors about whether provision is made for students to do individual study](image)

Figure 9.9 shows that the majority of student nurses, namely 259 (69.8%) out of 371 respondents, and the majority of nurse teachers, namely 26
(65.0%) out of 40 respondents, felt that provision is not made for student nurses to do individual study. However, the majority of clinical supervisors, namely 103 (92.0%) out of 112 respondents, felt that they make provision for student nurses to do individual study. The differences in perception may be due to the fact that clinical supervisors felt that the occasional homework or teaching sessions they gave to students were "formal provisions" – even though the homework and teaching sessions were not compulsory for students.

The commonest reasons which student nurses, nurse teachers and clinical supervisors gave for believing that provision was made for individual student nurse study were that student nurses were sometimes given homework, case studies, presentations and pre-assessment follow ups to do. These findings suggest that no formal assignments are given to student nurses in clinical area placements to motivate them to keep on studying. Mellish and Brink (1990:104) recommend compulsory assignments which will link theory and practice to motivate students to continue learning during clinical placements. However, the commonest reason given by those who thought that there was no provision for students to do individual study was that the trained staff do not allocate time for students to study during their clinical area placements. They felt that this was shown by the excessive number of night duties that are allocated to student nurses. These findings support what was noted by Jacka and Lewin (1986:53), who found that student nurses spend very little time with professional staff and that they receive very little teaching while they are working in the wards.

**Item 10: Guidance and support given to clinical supervisors**

The aim of this item is to compare the opinions of nurse teachers and clinical supervisors about whether guidance and support are given to
clinical supervisors by nurse teachers – guidance and support that would assist them to cope with their responsibilities as teachers of student nurses. The responses are presented in Figure 9.10a.

Figure 9.10a: The opinions of nurse teachers and clinical supervisors about whether guidance and support is given to clinical staff by nurse teachers

Whereas a considerable majority, namely 34 (85%) of nurse teachers felt that they did give guidance and support to clinical supervisors, a small majority, namely 59 (51.8%) out of 114 clinical supervisors, felt that adequate guidance and support is given to clinical supervisors. However, 55
(48.2%) of clinical supervisors and only 6 (15%) of nurse teachers felt that not enough guidance and support of a kind that would facilitate student nurse teaching, was given to clinical supervisors.

The main reasons given by clinical supervisors were that nurse teachers do not involve themselves in the clinical areas and that communication between the school and clinical area staff was poor – especially with regard to any matter concerning student teaching and learning. These findings suggest that nurse teachers do not always communicate the objectives that student nurses are expected to achieve during clinical area placements to clinical supervisors. This is similar to what was noted by Jarrat (1983) and Grant et al (1996:25) when they found that ward sisters were not informed by the school of nursing about the extent of students’ theoretical knowledge and what they were expected to accomplish during their clinical area placements. Fretwell (1982), Alexander (1983:149-298) and Clinton (1985) also found that very little supervision of student nurses was done by nurse teachers during clinical placements. There were 6 (15%) nurse teachers who felt that they were too busy with too many large groups to give guidance and support to clinical supervisors.

The nurse teachers and clinical supervisors who felt that guidance and support is given to clinical supervisors, mentioned a number of activities which are carried out. These are shown in Figure 9.10b.
Figure 9.10b: What nurse teachers do to guide and support clinical supervisors

Figure 9.10b illustrates that the most common activity mentioned by the majority, namely 28 (84%) out of 34 nurse teachers, and 18 (30.5%) out of 59 clinical supervisors, is that nurse teachers follow up student nurses to undertake clinical teaching. Interestingly, the responses of the majority of nurse teachers contradict their responses when they were asked about teaching in the clinical areas in chapter 7, item 12, where 24 (60.0%) out of 40 respondents said that they "seldom to never" carried out clinical teaching during student nurse clinical area placements.
The second most common activity mentioned by the two groups was organizing and conducting in-service training for clinical supervisors. This was mentioned by 13 (32.5%) of nurse teachers and 22 (37.3%) of clinical supervisors. Seventeen (28.8%) of clinical supervisors also felt that nurse teachers monitor the performance and progress of student nurses during clinical placements and assist clinical supervisors if they have problems with student nurses. The latter activity was mentioned by 9 (15.3%) clinical supervisors. Two (5.0%) of nurse teachers felt that they encourage and support clinical supervisors by praising them for facilitating student learning. This finding shows that nurse teachers perform a vital function in supporting clinical supervisors, who play a major role in the clinical education of student nurses.

Item 11: Communication between the school of nursing and clinical supervisors

The aim of this item is to compare the rating of communication between the school of nursing and clinical supervisors by nurse teachers and clinical supervisors. The responses are presented in Figure 9.11.
Figure 9.11 Percentage distribution of how nurse teachers and clinical supervisors rated communication between the school and clinical area staff

Figure 9.11 shows that the majority of nurse teachers, namely 21 (52.5%) out of 40 respondents, and 40 (35.7%) out of 114 clinical supervisors, rated the communication between the school and clinical area staff as satisfactory. However, a considerable number, namely 53 (47.3%) of clinical supervisors and only 8 (20%) of nurse teachers rated the communication as poor. It is, however, evident from figure 9.11 that the majority, namely 32 (80.0%) nurse teachers and 59 (52.7%) clinical
supervisors rated the communication to be “satisfactory to good”. This suggests that there is a reasonable degree of communication between the school and the clinical area staff. This finding is different from that reported by Jarrat (1983) and Grant et al (1996:25), who found that ward sisters complain of not being informed by nurse teachers about students’ level of theoretical knowledge and what they are expected to accomplish during clinical placements.

The 32 (80.0%) nurse teachers who felt that the communication was “satisfactory to good” gave a number of reasons to justify their rating. The most common justification for the higher rating of communication was that information flowed in meetings and workshops between the two parties, and that the appointment of a public relations officer in each institution helped to facilitate communication between the school of nursing and clinical supervisors. Nurse teachers also follow up students so that they can perform clinical teaching in the clinical areas.

The 59 (52.7%) clinical supervisors who believed that communication was “satisfactory to good” justified this by stating the following:

- Communication takes place before student nurses are allocated to clinical areas.
- Meetings are held between school and clinical staff.
- The clinical supervisors also felt that they work together with the school staff on a daily basis (especially clinical instructors).

The 53 (47.3%) out of 112 clinical supervisors who believed that the communication between the school of nursing and clinical areas was poor gave several reasons for their perception. The commonest reasons they gave for assigning a poor communication rating were as follows:
• Few meetings take place between school and clinical area staff (19 out of 23 respondents: 35.8%).

• Nurse teachers are not involved in the clinical teaching of student nurses during clinical area placements (18 respondents: 34.0%).

• Poor relationships exist between the school and clinical area staff (12 respondents: 26.4%).

The 8 nurse teachers who felt that communication was poor also gave several reasons to justify their poor rating. The commonest reasons they gave were that clinical supervisors only communicate with the school when they encounter problems with student nurses. This was indicated by all 8 nurse teachers. Five out of 8 nurse teachers felt that the poor communication was attributable to an insufficient number of meetings between the school and clinical supervisors.

The chronic shortage of nurse teachers was also felt to be one of the causes of poor communication. Two nurse teachers felt that relationships between the school and clinical area staff were poor. This agrees with what 12 (26.4%) clinical supervisors felt. According to Kirkpatrick, Byrne, Martin and Roth (1991:102), good communication, rapport, mutual trust and respect are the cornerstones of effective collaboration.

**Item 12a: Suggestions for improving study blocks**

The opinions of student nurses, nurse teachers and clinical supervisors about how study blocks could be improved are presented in Figure 9.12a.
Figure 9.12a: Percentage distribution of the opinions of student nurses, nurse teachers and clinical supervisors about how study blocks might be improved.

Figure 9.12a shows that several suggestions were made:

- The commonest suggestion made by student nurses (229 out of 415 respondents: 55.2%), nurse teachers (23 out of 40 respondents: 57.5%) and clinical supervisors (5 out of 114 respondents: 4.4%) was that the theoretical content per study block should be reduced by either cutting out some of the subjects or increasing the length of study blocks.

- The next commonest suggestion was that the number of nurse teachers on the staff should be increased so that all nurse teachers would have enough time to help weaker students and also continuously to update...
enough time to help weaker students and also continuously to update their knowledge of current clinical practice. This was suggested by 50 (12.0%) student nurses, 25 (62.5%) nurse teachers and 8 (7.0%) clinical supervisors.

- Both student nurses (62: 14.9%) and nurse teachers (20: 50.0%) also suggested that the training institutions should provide adequate teaching and learning resources. The resources which were mentioned were teaching aids and reference books in the libraries.

- The two groups of respondents, 48 (11.6%) student nurses and 5 (12.5%) nurse teachers also suggested that student-centred teaching methods should be used in teaching student nurses during study blocks. This suggestion is in conformity with andragogical principles of teaching (Knowles 1980:40-59).

- Another suggestion made by 25 student nurses (6.0%), 1 nurse teacher (2.5%) and 7 clinical supervisors (6.1%) was that nurse teachers should send student nurses to the wards during study blocks. This would help them to integrate theory with practice.

- A few student nurses (53: 12.8%) also suggested that student nurses should be allocated study periods so that they could undertake individual study. This finding shows that student nurses, as adult learners, want to direct their own learning – another basic assumption of andragogy (Knowles 1980:40-59).

- A few nurse teachers (3: 7.5%) suggested reduction in the number of student intakes so that nurse teachers would have more time for planning, clinical teaching and updating themselves for the benefit of student nurses.

- A small number of student nurses (16: 3.9%) and clinical supervisors (8: 7.0%) suggested that student nurses could be motivated if they were
Item 12b: Suggestions for improving clinical area placements

The suggestions which student nurses, nurse teachers and clinical supervisors made about possible ways to improve clinical area placements are presented in Figure 9.12b.

![Figure 9.12b: Percentage distribution of the suggestions made by student nurses, nurse teachers and clinical supervisors about how clinical area placements could be improved](image)

Figure 9.12b shows that the following suggestions were made:
• The commonest suggestion made by student nurses (83 out of 415 respondents: 4%), nurse teachers (29 out of 40 respondents: 72.5%) and clinical supervisors (57 out of 114 respondents: 50%) was that clinical supervisors and qualified staff should be increased so that students could be taught more efficiently and so that students would not have to be used as stop-gaps for staff shortages.

• The need to strengthen student nurse supervision was suggested by 8 (20%) nurse teachers and 4 (3.5%) clinical supervisors.

• A number of student nurses (83: 20%), nurse teachers (15: 37.5%) and clinical supervisors (24: 21.1%) suggested that the training hospitals should be provided with the necessary resources for teaching student nurses in clinical areas. The resources mentioned were the kind of equipment and materials that students need to learn procedures. Possessing such equipment and material would relieve them from the difficulties of having to improvise. They also suggested that reference books be bought for the clinical areas.

• Forty three (10.4%) of student nurses, 15 (37.5%) nurse teachers and 10 (8.8%) clinical supervisors suggested that clinical area placements should be done in accordance with whatever content students had already covered. If this were done, student nurses would be empowered to integrate theory with practice (a necessity for adult learners). Jacka and Lewin (1986:53) made similar recommendations when they stated that student nurses should be given the opportunity to acquire the necessary theoretical knowledge, skills and attitudes before they are allocated to those clinical areas.

• Out of the three groups of respondents, student nurses (107: 25.8%), nurse teachers (9: 22.5%) and clinical supervisors (16: 14.0%) also suggested that nurse teachers should undertake clinical teaching in wards that would assist student nurses to integrate theory with practice.
The student nurses, (81: 19.5%), and nurse teachers (11: 27.5%), suggested that student nurses should not be allocated inappropriate off duties and tasks such as split-off duties, excessive night duties and other tasks such as non-nursing duties.

Because of the problems the student nurses face as workers and trainees, 14 (3.4%) student nurses, 8 (20.0%) nurse teachers and 13 (11.4%) clinical supervisors suggested that the student nurses should be supernumerary so that they only concentrate on their learning. This recommendation is similar to that of McMillan and Dwyer (1989), cited by Mashaba (1994:307), namely that student nurses should not be committed to hospital service for the first two years of their training.

One hundred and forty-five (34.9%) student nurses suggested that nurse teachers should communicate the level of student training and how much and what content student nurses had covered in the study blocks to the clinical supervisors in the clinical areas to which students would be allocated.

A fair number of student nurses (188: 45.3%) also suggested that clinical teaching had to be planned and not be performed in a haphazard manner. Uys (1992:23) has also observed that clinical teaching is rarely performed in any systematic and planned manner.

9.3 SUMMARY

While the majority of nurse teachers and clinical supervisors understood the meaning of the block system, the majority of student nurses did not. The most common positive feature of study blocks indicated by nurse teachers and student nurses was that it gave students opportunities to learn. Most clinical supervisors felt however that study blocks were conducive to student learning. A high percentage of nurse teachers felt that an integration
of theory and practice did occur and the fact that students attend lessons as groups gives these students equal opportunities to learn.

The most common positive feature of clinical placements indicated by nurse teachers, clinical supervisors and student nurses was integration of theory and practice, followed by the provision of students with opportunities to learn and practise skills. The most common negative aspects of study blocks identified by nurse teachers, clinical supervisors, and student nurses, in descending order of frequency, were too much content per study block, inadequate teaching and learning resources, large classes and a high student-teacher ratio. The most common negative aspects of clinical placements identified by nurse teachers, clinical supervisors and student nurses were, in order of descending frequency, a shortage of qualified staff, the overworking of student nurses, inadequate resources and equipment and the allocation of students to clinical areas for which they had not yet been taught the theoretical content. Clinical supervisors indicated that student nurses were sometimes allocated to clinical areas merely because those areas did not have enough staff. Clinical supervisors and student nurses also identified inadequate student supervision and excessive night duty as negative features of clinical placements.

While the majority of nurse teachers and clinical supervisors felt that study blocks were organized in a way which promoted student teaching and learning, just over half (50.8%) of the student nurses said they were not of that opinion. While the majority of nurse teachers and clinical supervisors were of the opinion that clinical area placements were not arranged in a way that promoted the best education of student nurses, 50% of the student nurses felt that they were well arranged. While student nurses and nurse teachers felt that the formal lecture was the most commonly used method of
teaching in study blocks, nurse teachers, clinical supervisors and student nurses were of the opinion that ward rounds were the most commonly used teaching method during clinical placements.

Junior sisters and senior sisters were ranked (in that order) by student nurses and clinical supervisors as the grade of cadres who most commonly assisted student learning during clinical placements. Sisters in charge were ranked by student nurses as the third most common group of people who assisted student nurses to learn. Most nurse teachers, clinical supervisors and student nurses felt that student nurses did have the theoretical background for responsibilities in the clinical areas. The majority of student nurses and clinical supervisors said that student nurses were helped to integrate theory and practice during clinical area placements. While the majority of student nurses and nurse teachers felt that no provisions were made for student nurses to carry out any individual study during clinical placements, most clinical supervisors were of the opinion that such provision was made. Most nurse teachers and clinical supervisors agreed that guidance and support were given to clinical supervisors by nurse teachers to assist the teaching and learning of students during clinical placements.

The suggestions that nurse teachers and clinical supervisors made to improve study blocks were that the number of nurse teachers be increased and that ward visits be scheduled in such a way that student nurses might have the opportunity to integrate theory and practice. The provision of adequate teaching and learning resources and use of student-centred teaching methods were also suggested by nurse teachers and student nurses.
Nurse teachers, clinical supervisors and student nurses suggested that the number of qualified staff be increased, that student supervision be put on a sound footing, that adequate resources be provided, that clinical placements be done in accordance with the content that had been covered in study blocks, and that clinical teaching by nurse teachers and the assignation of supernumerary status to student nurses would improve the efficacy of clinical area placements. Both nurse teachers and student nurses felt that student nurses should not be given inappropriate duties or tasks and off duties and that student nurses should not be given excessive night duties. Student nurses also suggested that clinical teaching should be planned and that nurse teachers should inform clinical supervisors about the precise level of knowledge that students had attained and the exact amount of content that they had covered while in study blocks.

The summary, findings, conclusions and contributions of the study will be presented in the following chapter.
CHAPTER 10

SUMMARY, FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND CONTRIBUTIONS OF THE STUDY

10.1 INTRODUCTION.

A summary of the study, its main findings, conclusions, recommendations and contributions, are presented in this chapter.

The study investigated the perceptions of student nurses, nurse teachers, clinical teachers, ward/unit sisters and community health nurses with regard to the block system that is used to educate student nurses in the general nurse diploma programme in Zimbabwe. The basic professional nursing qualification that most nurses have in Zimbabwe is a diploma in general nursing. The training programme for the Diploma in General Nursing is hospital-based, and the major training schools are the Harare, Parirenyatwa, Mpilo and United Bulawayo schools of nursing, all of which operate in conjunction with the only four large central hospitals in the country.

The block system of nurse education is used for both classroom teaching and clinical experience. The training and education programme runs over a period of three years. Thirty-eight weeks of the training period are allocated to study blocks and one hundred and thirty nine weeks are allocated to clinical experience in clinical areas. The block system of nurse training in Zimbabwe, uses an apprenticeship-type of training that takes student nurses as part of the hospital working personnel. In this capacity, student nurses are used to provide nursing services to patients or clients and they are remunerated for their services.
The study problem was inspired by the belief that teaching and learning in the block system may be both ineffective and inadequate because there is considerable amount of anecdotal evidence from student nurses' end of study block, clinical area experience and end-of-training evaluation and discussions. Criticisms of the block system have been documented in the literature that has been written in South Africa and other countries that use the block system of nurse education. Some of the criticisms that emerge from this literature are (1) that little or no attempts are made to match the theory content that student nurses have learnt in a particular study block with the clinical placement area to which they are subsequently sent, and (2) that formal didactic methods of teaching, such as formal lectures, are commonly used in classrooms to teach large amounts of learning material to student nurses — with the unfortunate result that study blocks become little more than periods of cramming and regurgitation of content during examinations (Jacka & Lewin 679-680). Although most of the research into the block system of nurse education was carried out in developed countries, their findings may never have been substantiated by research in developing countries such as Zimbabwe. It was therefore important to undertake research into student nurses' and supervisors' perceptions of the block system as it is used in Zimbabwe.

The purpose of the research was to elicit and analyse student nurses' and supervisors' perceptions of the block system in order to identify its positive and negative features.

The objectives of the study were:

- to determine what it is that student nurses and supervisors understand by "the block system of nurse education".
- to identify those positive aspects of the block system which facilitate the teaching and learning of student nurses - as these are perceived by both student nurses and their supervisors.
• to identify those negative aspects of the block system which inhibit and obstruct the teaching and learning of student nurses - as these are perceived by both student nurses and their supervisors.

• to identify the managerial and teaching techniques used by supervisors as facilitators and teachers within the block system and how such techniques are perceived by both student nurses and their supervisors.

10.2 LITERATURE REVIEW

An extensive literature review was carried out on the various kinds of systems that have been and are being used in nursing education, the centrality of the teaching and learning environment in nursing education, and the adult learning theory which was used as the theoretical framework to guide the study and provide a basis for critique and understanding.

There are five systems of nurse education that were identified from the literature. These are the block system, the modular system, the study day system, the daily lecture release system, and the daily concurrent theory and practice system. The successful implementation of the block system, as defined by Dunster (1986:67-75) and Davies (1983:580), can only operate successfully if certain preconditions are fulfilled (Mellish & Brink 1990:104). These pre-requisites include adequate staffing, good communication between the school of nursing and clinical areas, an allocation of student nurses to relevant clinical areas, the linking of theory to practice, and compulsory assignments (with subsequent feedback during clinical attachments).

Several advantages and disadvantages of the block system were identified. One of the main advantages of the block system is that the integration of theory and practice can be highly successful provided that student nurses are taught whatever theory content is relevant to a clinical placement before such student nurses are
placed in that clinical area. The other main advantage of the block system is that study blocks, with their predetermined working hours and weekends off, free student nurses from the stresses and strains associated with performing the physical work in wards and the unsociable working hours associated with night duties, weekend duties and long hours of work. The main disadvantage is that didactic teaching methods such as the formal lecture method are commonly used because most teachers have to cover an enormous amount of content in each study block. Student nurses are then left with little option other than to use study blocks as periods for cramming information in preparation for tests and examinations.

The other three systems mentioned above are rarely used in nurse education because there are too many administrative problems associated with them. All these systems of nurse education were designed as attempts to close the gap between theory and practice.

The theory-practice gap occurs when what is taught in the classroom or written in examinations is not what is practised in the clinical areas. This has been attributed to the fact that classroom teaching and textbook descriptions and presentations of diseases are presented in terms of well-defined investigations, diagnoses and treatments – whereas, in reality, patients rarely present with conditions or diseases that can be so neatly categorised (McCaugherty 1991). The other causes of the theory-practice gap are that nurse teachers are unfamiliar with current ward practices, the communication between the nursing school and clinical areas is poor (and sometimes non-existent), and that student nurses are allocated to clinical areas when they have not been taught the theory content relevant to that clinical area. A number of researchers have, however, noted that the theory-practice gap can be narrowed by the integration of theory and practice in both classroom and clinical teaching, the use of problem-based learning methods for student nurses (Frost 1996:105), and the use of student-centred teaching methods in environments that
are conducive to learning. Student nurses and patients would also benefit if the curriculum and its implementation were based on the needs of the patients and the learning needs of student nurses.

The centrality of the teaching and learning environment focuses on the influence of both the classroom and clinical area environments on student nurse learning and how nurse educators influence the learning of student nurses. As adult learners, student nurses are supposed to direct their own learning (as is done in, the modular system). In the block system, however, classroom teaching is directed by the teacher who uses the formal lecture method of instruction – except when she/he is teaching practical procedures which are performed in either simulated clinical settings or in demonstration rooms. Many nurse teachers justify the use of the formal lecture method because they point to the large groups of student nurses they have to teach (Crotty 1993:21) and the vast volume of knowledge that they are expected to teach their student nurses (Bligh 1971, Harvey & Vaughan 1990:185). Huge classes are common in Zimbabwe where one group may contain as many as 65 student nurses. The use of formal lecture methods of instruction is frustrating and stressful for both student nurses and their teachers (Boman 1986:226; James & Jones, cited in Ghazi & Henshaw 1998:43). The large classes mean that student nurses may be accommodated in overcrowded and poorly ventilated classrooms.

The nurse teacher can improve her/his efficiency as a teacher and promote student nurse learning by making sure that she/he is well trained both academically and in the most up-to-date clinical skills so that she/he can impart knowledge and skills in a classroom setting. The nurse teacher should also teach in a clear and well-organised manner by providing appropriate examples of the most common clinical conditions that student nurses will encounter during their time in clinical placement areas (Gross et al:1993:183). The use of suitable examples will prepare student nurses to integrate the theory they have learnt with the practice they will
perform — thereby closing the theory-practice gap. An effective classroom teacher is also sympathetic and approachable and takes great care to cultivate respectful, sympathetic and encouraging relationships with her/his student nurses.

The clinical environment is the area where student nurses integrate theory and practice and learn new skills and appropriate professional attitudes. It is also in the arena of clinical environment that student nurses obtain experience as members of clinical area health teams, and it is here that they interact with both patients and their relatives. Extreme frustration and stress may however be aroused if clinical supervisors are not supportive and helpful and if student nurses are allocated to clinical areas before they have been taught the relevant theory content in their study blocks. In the presence of such deficits in support and organisation, student nurses may have feelings of being incompetent to evaluate and provide psychological and physical care to patients — through no fault of their own (Zweig 1988, cited in Mahat 1998:13).

The clinical supervisor must be a good clinical nurse and teacher and have extensive clinical experience. She/he must be a role model as far as knowledge, skills and attitudes go. She/he has to be approachable, sympathetic and understanding of the fact that student nurses may fear harming patients because of their ignorance and unpreparedness. Apart from the above attributes and dispositions, a good clinical supervisor must set aside time for teaching student nurses and allowing them to engage in discussions. Since the clinical supervisor has to apportion her/his time between the needs of patients and the needs of student nurses, it is unfortunately the needs of student nurses that may invariably be neglected because of the critical and chronic shortage of trained staff and the large numbers in student groups that one finds in the Zimbabwean nurse training situation.
The andragogical theory of Knowles was used as the theoretical basis of the research. Knowles's andragogy was shown to be based on four assumptions about changes in self-concept, the role of experience, readiness to learn and orientation to learning (Knowles 1978:54-58). The literature review on andragogy revealed the following principles about adult learners:

- Adult learners have a deep drive to be self-directed and want to take control of their learning process (Newstrom & Lengnick-Hall 1991:44). Self-directed teaching methods place much more control of the learning process in the hands of the students themselves. Thus, students who use self-directed learning methods become involved in the diagnosis of their own learning needs, the planning of their own learning activities, and the formulation of objectives for their own evaluation (Knowles & Associates 1984).

- Adult learners possess experience – and experience forms a solid foundation on which learners can build new understanding and acquire new knowledge, and skills. Research has shown that adult learners learn more effectively when they are able to utilise their own experience (Cherem 1990:20). Proper adult learning encourages experiential/action learning techniques such as group discussions and problem solving. Such methods give adult learners opportunities to use their experience to solve new problems (Brundage & Mackeracher 1980:97; Knowles & Associates 1984).

- Adult learners are ready to learn new knowledge and skills in order to solve immediate social and professional problems (Hersh 1984:29-44). Whatever content is taught in adult learning should therefore be immediately applicable in the practical contexts which adult learners encounter.

- The orientation of adult learning is always problem-centred. Adults are motivated to learn if the knowledge they have acquired assists them to solve immediate social and professional problems (Knowles 1980:45, Hersh 1984:29-44).
10.3 METHODOLOGY

A cross-sectional descriptive survey research design was used to obtain data about the perceptions of student nurses, nurse teachers and clinical supervisors. The target population was one group of first-year, second-year and third-year student nurses, nurse teachers and clinical supervisors in the four central hospitals as well as community health nurses in Mashonaland East Province.

One group of student nurses in the first, second and third year of training in each of the four central hospitals and all supervisors in the central hospitals and Mashonaland East Province were included in the study. The number of respondents was therefore as follows:
- 415 student nurses
- 114 clinical supervisors
- 40 nurse teachers

Three questionnaires were used to collect data from student nurses, nurse teachers and clinical supervisors. The data was collected from student nurses and community health nurses by using self-administered questionnaires. The data from nurse teachers and clinical supervisors in the central hospitals was collected by means of structured interviews.

10.4 FINDINGS AND CONCLUSIONS

The main findings and conclusions are presented in terms of the study objectives. This is done so that a determination may be made of whether the study objectives were achieved.

10.4.1 Objective 1 aimed to determine what the student nurses and supervisors understand by “the block system”. The findings revealed that most nurse teachers understood what the block system of nurse education meant. The clinical
supervisors and student nurses on the other hand had a limited knowledge (or no knowledge) of what the block system of nurse education meant. The study revealed that 223 (73.6%) of 303 student nurses, 45 (40.9%) of 110 clinical supervisors and 9 (22.5%) of 40 nurse teachers did not understand the meaning of the block system of nurse education. It was also found that 25 (21%) of 110 clinical supervisors said that they did not know what happens during study blocks (see chapter 8, Item 11a). This finding was not documented in the literature review. It may therefore be a hitherto unidentified reason for the poor relationships that often prevail between the school of nursing and the clinical area staff.

10.4.2 Objective 2 sought to determine the positive aspects of the block system which facilitate the teaching and learning of student nurses – as these are perceived by student nurses and their supervisors. The student nurses, nurse teachers and clinical supervisors identified a number of positive aspects of the block system which in their opinion enhance and promote teaching and learning.

10.4.2.1 The research identified the following positive features of the block system:

- Enough time is allocated for student nurses to acquire knowledge and skills without fear of harming patients. This was mentioned by all 40 (100%) nurse teachers, 237 (57.1%) of 415 student nurses and 53 (46.5%) of 114 clinical supervisors. This tends to justify the rationale given for the introduction of the block system in nurse education in England (Carter 1939:165).

- Study blocks provide student nurses with an environment which is conducive to learning because it permits organised teaching and learning without the stresses and strains of ward work. This was the opinion of 74 (64.9%) of 114 clinical supervisors, 16 (40%) of 40 nurse teachers and 57 (13.7%) of 415 student nurses. This confirms what Mellish and Brink (1990:102-103) and Searle (1982:52-53) identified as one of the benefits of the block system for student nurses.
• The teaching of student nurses is facilitated by the availability and willingness of nurse teachers to fulfil their teaching role to student nurses during study blocks. This was stated by 18 (45%) nurse teachers, 95 (26.3%) clinical supervisors and 95 (22.9%) student nurses.

• Student nurses benefit from attending study blocks as a group because it gives them all equal learning opportunities. This was mentioned by 25 (62.5%) nurse teachers. In addition, their evaluation by means of end-of-study block examinations or tests, is easier and fairer. The progress of student nurses is monitored so that assistance can be given to weak students before they are left far behind by others. This was expressed by 27 (6.5%) student nurses.

• Integration of theory and practice takes place during study blocks - especially if student nurses are allocated to clinical areas within six months prior to having completed a study block in which they learnt material that is relevant to their clinical area placement (Bendall 1971:171). This was mentioned by 29 (72.5%) nurse teachers and 8 (7%) clinical supervisors.

• Of the student nurses, 199 (48%) felt that study blocks encourage participatory teaching and learning methods such as group work, discussions and case presentations.

• Learning resources such as audiovisual aids and library books are available and easily accessible to student nurses during study blocks. This was the opinion of 85 (20.5%) student nurses, 29 (25.4%) clinical supervisors and 7 (17.5%) nurse teachers. This is one of the benefits of the block system of nurse education noted by Mellish and Brink (1990:102).

• There is enough time to do nursing practicals. This was the opinion of 57 (13.7%) student nurses.

• Study periods were allotted for student nurses to engage in individual study. This was mentioned by 49 (11.9%) student nurses.
- Student nurses have straight off duties and are also off during weekends. This was mentioned by 11 (2.4%) student nurses. This agrees with one of the benefits of study blocks identified by Mellish and Brink (1990:102-103) and Searle (1982:52-53).

10.4.2.2 The research identified the following positive features of clinical area placements:

- There are opportunities for the integration of theory and practice by student nurses. This was mentioned by all nurse teachers 40 (100%), 89 (78.1%) clinical supervisors out of 114 respondents, and 225 (61.5%) student nurses out of 415 respondents. This confirms the research findings of Bradshaw (1995:212).

- Student nurses had opportunities to learn and practise skills on real patients. This was mentioned by all 40 (100%) nurse teachers and 108 (26%) student nurses. This confirms what was noted by Quinn (1988:395), who wrote that the clinical setting provides student nurses with opportunities to learn both professional and life skills such as being a team member, decision making, communication and the application of nursing principles in the care of patients or clients.

- Student nurses have opportunities to develop proper professional attitudes towards patients/clients. This was noted by 25 (62.5%) of the nurse teachers.

- The practical skills of student nurses are evaluated by means of clinical assessments during clinical area placements. This was the opinion expressed by 15 (37.5%) nurse teachers.

- Student nurse learning is facilitated and promoted by clinical supervisors during clinical area placements. This was the opinion of 76 (66.7%) clinical supervisors and 13 (32.5%) nurse teachers.
- Student nurses are motivated to learn during clinical area placements. This was mentioned by 13 (11.4%) clinical supervisors. This agrees with the findings of Alexander (1984:4) when she noted the motivation of student nurses to learn was high during clinical area placements. This conforms with the andragogical principle which states that adult learners are motivated to learn if they can apply what they learn in the solution of their work problems (Knowles 1980:45).

- Student nurses are allocated to relevant clinical areas. This was the opinion of 45 (10.8%) student nurses. This suggests that some student nurses were lucky enough to be allocated to clinical areas for which they had been prepared by being taught the theory content that was relevant to that clinical area. This is in agreement with the research findings of Jacka and Lewin (1986:679-685), who noted that student nurses are the recipients of unequal learning opportunities and experiences during their clinical placements in the block system.

10.4.3 Objective 3 elicited the negative features of the block system perceived by the student nurses and their supervisors. These negative features of the block system inhibit and obstruct the teaching and learning of student nurses.

The student nurses, nurse teachers and clinical supervisors identified a number of negative aspects of the block system that inhibit and obstruct the teaching and learning of student nurses. These findings and conclusions are presented and discussed below under two headings that relate to study blocks and clinical placements respectively.
10.4.3.1 The negative features of study blocks identified by the research

The study revealed the following negative features of study blocks:

- Too much theoretical content is covered in every study block. This unfortunate situation compels nurse teachers to utilise the formal lecture methods of teaching merely in order to transmit the vast volume of content in the curriculum. This perception was recorded by all 40 (100%) nurse teachers and the majority of student nurses, namely 344 (82.9%) out of 415 respondents. This confirms a criticism of study blocks identified by Jacka and Lewin (1986:679-680) and Mellish and Brink (1990:103).

- There are inadequate teaching and learning resources in the schools of nursing. These include relevant and up-to-date books and teaching aids. In addition, physical facilities are too small and limited for the huge number of student nurses in each group. This causes overcrowding and poor ventilation in classrooms. These opinions were expressed by 38 (95%) nurse teachers, 57 (49.2%) clinical supervisors, and 133 (32%) student nurses. The overcrowding is caused by the fact that individual groups/classes of student nurses are simply too large for available facilities and teaching staff. This is a problem that may arise in any system of nurse education. It is not an inherent feature of the block system as such.

- The chronic and acute shortage of nurse teachers causes a high student nurse-nurse teacher ratio. This factor, mentioned by 10 (25%) nurse teachers, confirms what was noted by Cheng (1994:221), that a shortage of nurse teachers causes them to be overworked. Because they are overworked, they cannot teach their student nurses in the way that would most benefit them, and this inevitably prejudices the learning experiences of student nurses.

- The gap between theory and practice is caused by the differences between what is taught in class and what is practised in the clinical areas. This was mentioned
by 6 (15%) nurse teachers, 17 (4.1%) student nurses and 3 (2.6%) clinical supervisors. This agrees with what was noted by McCaugherty (1991).

- There are poor interpersonal relationships between student nurses and nurse teachers who were said to be authoritarian, disrespectful and intimidating towards student nurses. This factor was mentioned by 62 (14.9%) student nurses, and was confirmed by the findings of Clinton (1992:4-6).

- There is no rational continuity in the learning process because student nurses fragment the material presented into different study blocks. This factor was mentioned by 13 (32.5%) nurse teachers.

- No study periods are provided during study blocks. This was mentioned by 118 (28%) student nurses. This confirms what was noted by Mellish and Brink (1990:103) and Jacka and Lewin (1986:679-680), that study blocks may simply become periods of content-cramming for student nurses because of the large amounts of theory content that they are expected to master.

- Group work is excessive and ineffectual because nurse teachers do not always explain and clarify group work to students. Because of this, student nurses sometimes fail to understand topics covered using group work. This factor was mentioned by 27 (6.5%) student nurses.

- Because inadequate time is allotted for nursing practicals and/or demonstrations, student nurses are not given adequate demonstrations and return demonstrations. This was mentioned by 6 (1.4%) student nurses.

- There are too many study blocks at any one time and different study blocks overlap with each other. This means that both nurse teachers and clinical teachers have to cope with an excessive amount of work. This factor was mentioned by 10 (25%) nurse teachers and 4 (3.5%) clinical supervisors.
10.4.3.2 The research identified the following negative features of clinical area placements

- There is shortage of qualified nursing staff in the clinical areas. This was mentioned by all 40 (100%) nurse teachers, 69 (60.5%) out of 114 clinical supervisors and 125 (30.1%) out of 114 nurses.
- Student nurses are overworked because they are considered to be hospital workers. This was mentioned by 26 (65%) nurse teachers, 73 (64%) clinical supervisors and 65 (15.7%) student nurses.
- Student nurses are used to compensate for staff shortages. This was mentioned by 14 (12.3%) clinical supervisors.
- Because equipment and material resources are scarce and inadequate, supervisors and students have to improvise during clinical procedures. Even with the best will in the world, such improvisation cannot demonstrate what would have been demonstrated with the proper equipment. This factor was mentioned by 37 (92.5%) nurse teachers, 65 (15.7%) student nurses and 37 (32.5%) clinical supervisors. Under such circumstances, student nurses cannot practise the procedures they have been taught in the classroom. Student nurses find that they have to improvise or imagine equipment and material resources. This has serious negative implications for student nurse education and maintains the theory-practice gap. A lack of resources, however, may occur in any system of nurse education.

10.4.4 Objective 4 sought to identify the managerial and teaching techniques that supervisors as teachers and facilitators use in the block system.

- The findings revealed that student nurses are adults by virtue of their age and existing social responsibilities. They are often family people who are responsible for looking after the sick. The majority of student nurses, namely 278 (67.3%) out of 413, were 22 years old or more, and the remainder, namely
135 (32.7%), were between 17 and 22 years old. One hundred and two (24.6%) out of 414 student nurses were married, and 61 (14.9%) out of 409 respondents had children. This confirms that student nurses are adult learners in terms of the definitions of adulthood suggested by Crotty (1989:207), Burnard and Chapman (1990:44) and Darbyshire (1993:328). Adult learning teaching methods are therefore appropriate for the education and training of such student nurses.

- Student nurses are inadequately supervised and taught. This was mentioned by 82 (71.9%) clinical supervisors and 94 (22.7%) student nurses. This agrees with the research findings of Fretwell (1982), Alexander (1983), Clinton (1985), and Jacka and Lewin (1987).

- The allocation of student nurses to clinical areas is not based on the content covered during study blocks but the staffing needs of hospitals. Because this is the prevailing situation, student nurses often fail to receive opportunities to integrate theory and practice and are frequently required to perform procedures about which they have not been taught. In addition, student nurses are sometimes allocated to the same clinical area several times over. The distribution of student nurses is also often poorly organised. What one then finds is that there may be either too many or too few junior or senior student nurses in one clinical area. This opinion was expressed by 15 (37.5%) nurse teachers, 14 (12.3%) clinical supervisors and 31 (7.5%) student nurses. This agrees with research findings of Jacka and Lewin (1986:679-685).

- Student nurses were asked to perform inappropriate non-nursing tasks such as routinely being sent on errands. This was mentioned by 122 (29.4%) student nurses, 6 (15%) nurse teachers and 1 (0.9%) clinical supervisor.

- An excessive number of night duties are allocated to student nurses. Minimal teaching takes place in night-duty contexts. This was mentioned by 7 (6.1%) clinical supervisors and 19 (4.6%) student nurses.
• The interpersonal relationships between clinical supervisors and student nurses are poor. In the perception of student nurses, many clinical supervisors are unapproachable and remote, prone to excessive fault-finding, and impatient and disrespectful towards student nurses. This opinion was expressed by 7 (17.5%) nurse teachers and 15 (13.5%) student nurses.

• Student nurses lack the necessary motivation to learn during clinical placements. This was mentioned by 4 (10%) nurse teachers and 6 (5.3%) clinical supervisors. This tends to confirm the opinions of 26 (65%) out of 40 nurse teachers and 259 (69.8%) out of 371 student nurses, who felt that no provision was made to encourage student nurses to study during clinical area placements.

• Nurse teachers do not do any clinical teaching. This view was expressed by 7 (6.1%) clinical supervisors.

• There is lack of communication between nurse teachers and clinical supervisors about the content that student nurses have covered in study blocks and the objectives that student nurses should achieve during their clinical area placements. This view was mentioned by 5 (4.3%) clinical supervisors. This agrees with research findings of Jarrat (1983) and Grant et al (1996:25), who noted that ward sisters complained about the fact that nurse teachers do not inform them about the level of theoretical knowledge that student nurses have attained or about what they expect them to learn.

• Clinical teaching is only really assessment-orientated because it is only done when student nurses are being prepared for assessments. This was mentioned by 3 (0.7%) student nurses. This agrees with the finding of Uys (1992:23) who noted that clinical teaching is rarely performed in any systematic and organised manner and that it is perceived by student nurses to be assessment-orientated.
• Limited opportunities are given to student nurses to practise procedures and to prepare themselves for assessments. This was mentioned by 26 (6.2%) student nurses.

• Student nurses are only allowed to be present on ward rounds in their third year when they are about to be assessed for their ward management skills and competence. This was expressed by 2 (0.5%) student nurses.

• The formal lecture teaching method is the most frequently used teaching method during study blocks. This method was ranked highly by 39 (97.5%) out of 40 nurse teachers and 380 (95.7%) out of 397 student nurses. This confirms the findings of Jacka and Lewin (1986:679-680). Nurse teachers held this opinion because they felt that it was the only viable option in the face of unmanageably large groups of students and the amount of new knowledge and information that had to be taught. Knowles (1984:13) agrees that formal lectures are necessary when students are learning totally new content.

• Student nurses do not like the formal lecture teaching method, which they perceived as being too monotonous and involving too much dictation and few (if any) explanations. This view was expressed by 27 (6.5%) student nurses. This agrees with the research findings of Harvey and Vaughan (1990:185).

• Student nurses are most frequently assisted to learn (in descending order of frequency) by other student nurses, junior sisters, senior sisters and sisters in charge. Assistance to learn provided by student nurse peers was ranked highly by 335 (82.9%) out of 404 student nurses and by senior student nurses 330 (81.9%) senior student nurses out of 403 student nurses. This agrees with the findings of Iwasiw & Goldenbenberg (1993:659). Junior sisters were highly ranked by 69 (60.5%) out of 114 clinical supervisors and 284 (70%) out of 406 student nurses. Senior sisters were highly ranked by 264 (65.2%) out of 405 student nurses. Sisters in charge were highly ranked by 283 (69.7%) out of 406 student nurses. This agrees with what was found by Crotty and Butterworth (1992), namely that clinical teaching is often delegated to the most junior
nursing staff when the ward is busy. Nurse teachers were highly ranked by only 135 (34.6%) out of 390 student nurses and 3 (2.6%) out of 114 clinical supervisors. This finding was confirmed by 24 (60%) out of 40 nurse teachers who felt that they seldom teach student nurses during clinical area placements. These findings agree with those of Reid (1985), who found that nurse teachers seldom teach in the clinical areas. These findings also agree with those of Bendall (1975) and Alexander (1983:143-208), who found that student nurses are mostly taught by ward sisters.

10.5 LIMITATIONS
This research had two main limitations. These are discussed below.

Limitations relating to resources
Because of limitations on resources, this research was performed in the four large central hospitals which train general nurses, that is, Harare, Parirenyatwa, Mpilo and United Bulawayo Hospitals. Only one province, Mashonaland East, which is used for training student nurses in community health nursing, was included in the study.

Limitations relating to data collection
Data was collected from student nurses by means of self-administered questionnaires because of the large number of respondents in the research sample. This method produced a limitation because some of the student nurses did not respond to all the questions. The community health nurses in Mashonaland East Province were scattered over a wide geographical area and the researcher therefore collected data from them by means of self-administered questionnaires instead of interviews.
10.6 RECOMMENDATIONS

School of nursing
Several recommendations which pertain to the schools of nursing emerged from this research. They are presented below.

- A reduction of study block content. This can be achieved by teaching the essential aspects of topics within different subjects. Detailed information should only be provided about the most common conditions in the country, such as malnutrition, pneumonia and appendicitis. A reduction in study block content can also be achieved by ensuring that the content of each study block corresponds directly to the length of the study block. This will enable nurse teachers to use the student-centred teaching methods suggested by both student nurses and nurse teachers in chapter 6, item 17, and chapter 7, item 16.

- The curriculum should be carefully revised so that it contains some essential topics which occur frequently. This would close the theory-practice gap.

- The number of nurse teachers should be increased (this was suggested in chapter 6, item 17, chapter 7, item 16, and chapter 8, item 20). This can be achieved if more nurse teachers are employed and trained. Although the government will have to provide the funds for this to happen, it will be an investment that will benefit the country and its people because it would ensure that professional nurses are well trained and prepared to work in any environment in the country. The increase of nurse teachers will reduce the student-nurse teacher ratio and this will give nurse teachers enough time to individually assist those students who need extra help. Nurse teachers will then also have enough time to prepare their lessons, update their knowledge and participate in research.

- The physical facilities and resources for teaching and learning should be adequate. These inadequacies are not peculiar to the block system of nurse education: they are caused by a lack of funds provided for the budgets of the
schools of nursing by the Ministry of Health and Child Welfare. Student nurse training is adversely affected by learning in overcrowded and poorly ventilated classrooms, inadequate teaching aids and shortages of current textbooks and nursing journals.

**Clinical Areas**

- More professional nurses should be employed in clinical areas. This can be achieved by recruiting new staff and by retaining existing staff by improving salaries and conditions of service. At the time of writing, many posts are vacant because of resignations caused by the perception that conditions of service (such as salaries) are unacceptably poor. An increase in the number of qualified nursing staff will relieve student nurses from being overworked and from having to do an excessive number of night duties. It will also enable the professional nurses to teach and supervise student nurses because the pressure of clinical work will not be as great as it is now.

- Student nurses should be suitably accommodated during their community nursing experience in rural areas. Their accommodation should be well lighted at night; they should have running tap water and facilities that are suitable for student nurses who want to study (a desk and chair).

- Reciprocal exchange between clinical supervisors and nurse teachers should be instituted so that supervisors can understand what happens in the school of nursing. This kind of reciprocal experience will improve communication and understanding between the two areas.

- The clinical areas should have enough equipment and material resources for student nurses to practise procedures as they were taught; they should not have to improvise when performing procedures most of the time. This is not a feature that is specific to the block system. It could also occur in other systems of nurse education because it is dependent on the funds which the government makes available to the Ministry of Health and Child Welfare.
10.7 RECOMMENDATION FOR FURTHER STUDY

- The general nurse curriculum needs to be evaluated so that the optimal amount of content per study block can be exactly determined.
- Research needs to be carried out to determine why student nurses felt that the learning atmosphere in the school of nursing and clinical area placements is not conducive to student nurse learning.
- Research needs to be done to find out what the nature of the relationship is between various teaching methods (both in the classroom and clinical areas) and the size of classes.
- Research needs to be done to identify the causes of the theory-practice gap in nurse training and what may be done to close this gap.
- Research is needed to identify the amount of support and guidance given to clinical supervisors during their teaching and supervision of student nurses.

10.8 CONTRIBUTIONS OF THE STUDY

This research contributed in three ways to the understanding of how the block system of education affects nurse education.

The first contribution made by this research was that it confirmed some of the general criticisms, disadvantages and advantages which have already been identified by several of the researchers and authors who were mentioned in chapters 2 and 3. References were made to the findings of these researchers under the relevant sections which describe findings and conclusions. Some of these criticisms were the conclusions of researchers working in developed First World countries. This study, which confirmed most of these criticisms, was carried out in Zimbabwe, which is a developing country.

The second contribution of this research was that it has provided new information, and proposed criticisms and identified advantages which arise from the data that
was accumulated during the research process. Some of these new findings may need to be confirmed by additional research studies with larger samples because some of the conditions described, although anecdotally important, were described by only a small number of respondents.

The third contribution of this research is that a draft plan for the national block system of nurse education in Zimbabwe was developed by the researcher – a plan which, if implemented, radically improves the effectiveness of the block system by schools of nurse training in Zimbabwe.

10.9 CLOSING COMMENTS

The study has shown that the block system of nurse education can be extremely effective provided that certain minimal conditions are adhered to and implemented. This research, as with research undertaken in other parts of the world, shows that one of these conditions is that there should be an adequate number of properly qualified staff in the schools of nursing and clinical areas. The research also confirmed that the amount of theory content covered in each individual study block needs to be reduced so that study blocks do not become periods where student nurses are forced to cram facts and information so that they can pass their examinations. This research also demonstrated that the allocation of student nurses to clinical areas needs to correspond precisely to the theory and content that the student nurses have recently been taught in their study blocks. A failure to achieve this last condition means that student nurses are exposed to excessive amounts of stress and anxiety because they are expected to perform procedures on patients for which they have had no adequate training or tuition. A rational correspondence between content covered in study blocks and subsequent allocation to clinical areas will confer enormous benefits on student nurses, their clinical supervisors and their patients or clients.
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APPENDIX 1:

QUESTIONNAIRE 1: STUDENT NURSES’ PERCEPTIONS OF THE BLOCK SYSTEM USED IN THE GENERAL NURSE DIPLOMA PROGRAMME
## Appendix 1

### QUESTIONNAIRE 1: STUDENT NURSES’ PERCEPTIONS OF THE BLOCK SYSTEM USED IN THE GENERAL NURSE DIPLOMA PROGRAMME

(No names required for this questionnaire)

### DATE OF INTERVIEW

<table>
<thead>
<tr>
<th>Day</th>
<th>Month</th>
<th>Year</th>
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### QUESTIONNAIRE NO:

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</tr>
</tbody>
</table>

Please circle the appropriate answer:

### Section A:

#### Identifying particulars:

1. **Gender**
   - Male
   - Female

2. **Age**
   - 17 – 21
   - 22 – 26
   - 27 – 31
   - 32+

3. **Marital status**
   - Single
   - Married
   - Widowed
   - Divorced
   - Separated

4. **Number of children**
   - 0
   - 1
   - 2
   - 3
   - 4
5. Stage of training

<table>
<thead>
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<th>Year</th>
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<tr>
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<td>Mpilo Hospital</td>
<td>3</td>
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<td></td>
<td>United Bulawayo Hospital</td>
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6. Training school

SECTION B: PERCEPTIONS OF TEACHING AND LEARNING OF STUDENT NURSES USING THE BLOCK SYSTEM

7. What do you understand by the term block system?

8. What are the positive aspects of study blocks and clinical area placements which help you to learn?
   a) Study Blocks (learning in the classroom):

   b) Clinical Area Placements
9. What are the negative aspects of study blocks and clinical area placements which do not help you to learn?
   
   a) Study Blocks (Learning in the classroom)

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

   b) Clinical Area placements

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

10a. Are the study blocks organised in a way that helps your learning?

   Yes  1
   No   2

   If the answer is YES please explain how the organisation of study blocks helps your learning.

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

   If the answer is NO please state how the organisation of the study blocks does not help your learning.

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

10b. Are clinical area placements organised in a way that helps your learning?

   Yes  1
   No   2
If the answer is **YES** please explain how the organisation of clinical area placements helps your learning.


If the answer is **NO** please state how the organisation of clinical area placements does not help your learning.


11 To what extent is the teaching during study blocks (classroom) and clinical area placements done by the following methods (please tick):

- **Always** means daily
- **Often** means every 2-7 days
- **Seldom** means once in 8-14 days
- **Never** means at no time

a) During Study Blocks

<table>
<thead>
<tr>
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<th>Always 1</th>
<th>Often 2</th>
<th>Seldom 3</th>
<th>Never 4</th>
</tr>
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<tbody>
<tr>
<td>1. Lectures</td>
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<tr>
<td>2. Demonstrations</td>
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<td>3. Student led discussions</td>
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<td>4. Role play</td>
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<td>5. Care plan presentations</td>
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<td>6. Ward rounds</td>
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<td>7. Case studies</td>
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<tr>
<td>8. Tutorials led by tutors</td>
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<tr>
<td>9. Other (specify)</td>
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</tbody>
</table>
b. During clinical area placements

<table>
<thead>
<tr>
<th>Method</th>
<th>Always 1</th>
<th>Often 2</th>
<th>Seldom 3</th>
<th>Never 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lectures</td>
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<tr>
<td>2. Demonstrations</td>
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<td>3. Student led discussions</td>
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<td>4. Role play</td>
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<td>5. Care plan presentations</td>
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<td>6. Ward rounds</td>
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<td>7. Case studies</td>
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<tr>
<td>8. Tutorials led by tutors</td>
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<tr>
<td>9. Other (specify)</td>
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</tbody>
</table>

12. To what extent do the following categories of personnel assist you to learn during your clinical area placements? (Please tick)

Always means daily
Often means every 2-7 days
Seldom means once in 8-14 days
Never means at no time

<table>
<thead>
<tr>
<th>Grade/Designation</th>
<th>Always 1</th>
<th>Often 2</th>
<th>Seldom 3</th>
<th>Never 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nurse Teacher (Tutors)</td>
<td></td>
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<tr>
<td>2. Clinical instructor</td>
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<tr>
<td>3. Sister-in-charge</td>
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<tr>
<td>4. Senior sister</td>
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<tr>
<td>5. Junior sister</td>
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<tr>
<td>6. Doctor</td>
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<tr>
<td>7. Senior student nurses</td>
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<tr>
<td>8. Same level student nurses</td>
<td></td>
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</tbody>
</table>
13. Did the study block you last attended prepare you for the responsibilities you were given in the clinical area placements you were allocated to after the block?

Yes 1
No 2

If the answer is **YES** please indicate how you were prepared.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

If the answer is **NO** please give reasons.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

14a. Does the atmosphere during study blocks promote your learning?

Yes 1
No 2

If the answer is **YES** please state how the atmosphere promotes your learning:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

If the answer is **NO** please state how the atmosphere does not promote your learning.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
14b. Does the atmosphere during clinical area placements promote your learning?

Yes 1  
No 2

If the answer is YES please state how the atmosphere promotes your learning.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

If the answer is NO please state how the atmosphere does not promote your learning.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

15a. Are you assisted to link (apply) theory and practice during study blocks?

Yes 1  
No 2

If the answer is YES please indicate how this is done:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

If the answer is NO please state what you want to be done to assist you to link theory and practice.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
15b. Are you assisted to link theory and practice during clinical area placements?

If the answer is YES please indicate how this is done:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

If the answer is NO please state what you want to be done to assist you to link theory and practice:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

16. Are there any provisions made for you to do individual studying during your clinical area placements?

If the answer is YES please indicate these provisions:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

If the answer is NO please indicate what is lacking:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
17. Please list the suggestions you have on how the study blocks and clinical area placements can be improved to enhance your learning:

a) Study Blocks (Learning in the classroom)


b) Clinical Area Placements:


APPENDIX 2:

QUESTIONNAIRE 2: NURSE TEACHERS’ PERCEPTIONS OF THE BLOCK SYSTEM USED IN THE GENERAL NURSE DIPLOMA PROGRAMME
### Appendix 2

**QUESTIONNAIRE 2: NURSE TEACHERS’ PERCEPTIONS OF THE BLOCK SYSTEM USED IN THE GENERAL NURSE DIPLOMA PROGRAMME**

(No names required for this questionnaire)

**DATE OF INTERVIEW**

Day Month Year

**QUESTIONNAIRE NO:**

---

**SECTION A: IDENTIFYING PARTICULARS:**

Please circle the appropriate answer:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>Male 1</td>
</tr>
<tr>
<td></td>
<td>Female 2</td>
</tr>
<tr>
<td>2. Age</td>
<td>Under 30 1</td>
</tr>
<tr>
<td></td>
<td>30 – 39 2</td>
</tr>
<tr>
<td></td>
<td>40 – 49 3</td>
</tr>
<tr>
<td></td>
<td>50+ 4</td>
</tr>
<tr>
<td>3. Hospital/place where currently employed</td>
<td>Harare 1</td>
</tr>
<tr>
<td></td>
<td>Parirenyatwa 2</td>
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<tr>
<td></td>
<td>Mpilo 3</td>
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<td>United Bulawayo 4</td>
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</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>4. Years of experience as a nurse teacher: excluding training periods.</td>
<td>&lt;1 1</td>
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<td>1 - 5 2</td>
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<td>6 - 10 3</td>
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<td>11 - 15 4</td>
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<td>16 - 20 5</td>
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</table>
5. Professional qualifications (You may mark more than one)

<table>
<thead>
<tr>
<th>Qualification</th>
<th>1</th>
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<th>3</th>
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<td>State Certified Midwife</td>
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<tr>
<td>Nurse Anaesthetist Diploma</td>
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<td>Community Nursing Diploma</td>
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<td>Diploma in Nursing Education</td>
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<td>Other (Please Specify)</td>
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SECTION B: PERCEPTIONS OF TEACHING AND LEARNING OF STUDENT NURSES USING THE BLOCK SYSTEM.

6. What do you understand by the term "block system"?

_________________________________________________________________________________________________________________________________________________________________________________

7. What are the positive aspects of study blocks and clinical are placements which enhance the teaching and learning of student nurses.

_________________________________________________________________________________________________________________________________________________________________________________

_________________________________________________________________________________________________________________________________________________________________________________
a) Study Blocks (Learning in the classroom):


b) Clinical Area Placements (Learning in the Clinical Areas):


8. Please indicate the negative aspects of study blocks and clinical area placements which do not promote the teaching and learning of student nurses:
   a) Study Blocks:


   b) Clinical Area Placements:


9. Are the study blocks and clinical area placements organised in a way that promotes the teaching and learning of student nurses?
   a) Study blocks

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

   If the answer is YES, please give reasons.


If the answer is NO please indicate the problems with the way the study blocks are organised.

__________________________________________________________________________
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b. Clinical area placements.

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

If the answer is YES, please give reasons.

__________________________________________________________________________
__________________________________________________________________________
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If the answer is NO please indicate the problems with the way the clinical area placements are organised.

__________________________________________________________________________
__________________________________________________________________________
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10. To what extent do you use the following teaching methods during study blocks and clinical area placements of student nurses (please tick):

- Always means daily
- Often means every 2-7 days
- Seldom means once in 8-14 days
- Never means at no time

a) During Study Blocks
<table>
<thead>
<tr>
<th>Method</th>
<th>Always 1</th>
<th>Often 2</th>
<th>Seldom 3</th>
<th>Never 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lectures</td>
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<tr>
<td>2. Demonstrations</td>
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<tr>
<td>3. Student led discussions</td>
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<tr>
<td>4. Role play</td>
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<tr>
<td>5. Care plan presentations</td>
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<tr>
<td>6. Ward rounds</td>
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<tr>
<td>7. Case studies</td>
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<tr>
<td>8. Tutorials led by tutors</td>
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<tr>
<td>9. Other (specify)</td>
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</tbody>
</table>

Please justify your selection.


Please indicate the methods you would like to use given no constraints.


b) During clinical area placements

<table>
<thead>
<tr>
<th>Method</th>
<th>Always</th>
<th>Often</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lectures</td>
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<tr>
<td>11. Demonstrations</td>
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<tr>
<td>12. Student led discussions</td>
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<td>13. Role play</td>
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<tr>
<td>14. Care plan presentations</td>
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<tr>
<td>15. Ward rounds</td>
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<tr>
<td>16. Case studies</td>
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<tr>
<td>17. Tutorials led by tutors</td>
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<tr>
<td>18. Other (specify)</td>
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</tbody>
</table>

Please justify your selection

Please indicate the methods you would like to use given no constraints

11. To what extent do you carry out bedside teaching during student nurses’ clinical area placements? (Please tick)

Always means daily
Often means every 2-7 days
Seldom means once in 8-14 days
Never means at no time
Comments:


12. Do student nurses have the theoretical background for the nursing responsibilities assigned to them during their clinical area placements.

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

If the answer is **YES** please give reasons.


If the answer is **NO** please explain what is lacking.


13. Do you make provisions for student nurses to do individual study during their clinical area placements?

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

If the answer is **YES** please state these provisions.


14. Do you give guidance and support to the ward staff to assist the teaching and learning of student nurses during their clinical area placements?

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

If the answer is YES please indicate what you do.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

If the answer is NO please give reasons.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

15. How do you rate the communication between the school of nursing and clinical area staff?

- Good
- Satisfactory
- Poor

a. Please justify your answer:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
b. Please suggest how the communication can be made more effective.

16. Please suggest how study blocks and clinical area placements can be improved to enhance the teaching and learning of student nurses.
   a. Study Blocks

   ________________________________
   ________________________________
   ________________________________

   b. Clinical Area Placements

   ________________________________
   ________________________________
   ________________________________
APPENDIX 3:

QUESTIONNAIRE 3: CLINICAL SUPERVISORS’ PERCEPTIONS OF THE BLOCK SYSTEM USED IN THE GENERAL NURSE DIPLOMA PROGRAMME
APPENDIX 3

QUESTIONNAIRE 3: CLINICAL SUPERVISORS' PERCEPTIONS OF THE BLOCK SYSTEM USED IN THE GENERAL NURSE DIPLOMA PROGRAMME

(No names required for this questionnaire)

DATE OF INTERVIEW

Day  Month  Year

QUESTIONNAIRE NO:

Section A: Identifying particulars:

Please circle the appropriate answer:

1. Gender
   Male 1
   Female 2

2. Age
   29 and under 1
   30 – 39 2
   40 – 49 3
   50+ 4

3. Hospital/place where currently employed.
   Harare 1
   Parirenyatwa 2
   Mpilo 3
   United Bulawayo 4
   Mashonaland East 5

4. Years of experience as a qualified nurse: excluding training periods.
   1 – 5 1
   6 – 10 2
   11 – 15 3
   16 – 20 4
   21 and over 5
5. Number of years involved in the teaching/supervision of student nurses in your current post:

<table>
<thead>
<tr>
<th>Years Involved</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
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<tr>
<td>1 - 5</td>
<td>2</td>
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<tr>
<td>6 - 10</td>
<td>3</td>
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<tr>
<td>11 - 15</td>
<td>4</td>
</tr>
<tr>
<td>16 - 20</td>
<td>5</td>
</tr>
<tr>
<td>21 and over</td>
<td>6</td>
</tr>
</tbody>
</table>

6. Department/ward you are in charge of (not for clinical instructors)

<table>
<thead>
<tr>
<th>Department/Ward</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>1</td>
</tr>
<tr>
<td>Surgical</td>
<td>2</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>3</td>
</tr>
<tr>
<td>Community</td>
<td>4</td>
</tr>
<tr>
<td>Casualty</td>
<td>5</td>
</tr>
<tr>
<td>Outpatients</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
</tbody>
</table>

7. Professional qualifications (You may mark more than one)

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered General Nurse</td>
<td>1</td>
</tr>
<tr>
<td>Registered Psychiatric nurse</td>
<td>2</td>
</tr>
<tr>
<td>Operating Theatre Nursing Diploma</td>
<td>3</td>
</tr>
<tr>
<td>Community Nursing Diploma</td>
<td>4</td>
</tr>
<tr>
<td>State Certified Midwife</td>
<td>5</td>
</tr>
<tr>
<td>Intensive Care Nursing Diploma</td>
<td>6</td>
</tr>
<tr>
<td>Nurse Anaesthetist Diploma</td>
<td>7</td>
</tr>
<tr>
<td>Nursing Administration Diploma</td>
<td>8</td>
</tr>
</tbody>
</table>

Others (please specify:  

-----------------------------------

-----------------------------------
SECTION B: PERCEPTIONS OF TEACHING AND LEARNING OF STUDENT NURSES DURING THE BLOCK SYSTEM.

8. What do you understand by the term ‘block system’?

9. Please indicate the positive aspects of study blocks and clinical area placements which do not promote the teaching and learning of student nurses.
   a) Study Blocks (Learning in the classroom):

   b) Clinical Area Placements: (Learning in the clinical areas)

10. Please indicate the negative aspects of study blocks and clinical area placements which do not promote the teaching and learning of student nurses:
    a) Study Blocks:

    b) Clinical Area Placements:

11. Are the study blocks and clinical area placements organised in a way that promotes the teaching and learning of student nurses?
    a) Study blocks
       | Yes | 1 |
       | No  | 2 |
If the answer is **YES**, please explain how the organisation promotes their learning.

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

If the answer is **NO** please state how the organisation of study blocks does not promote their learning.

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

b. Clinical area placements.

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

If the answer is **YES**, please give reasons.

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

If the answer is **NO** please indicate the problems with the way the clinical area placements are organised.

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

12. To what extent do you use the following teaching methods during clinical area placements of student nurses (please tick):-

- **Always** means daily
- **Often** means every 2-7 days
- **Seldom** means once in 8-14 days
- **Never** means at no time
<table>
<thead>
<tr>
<th>Method</th>
<th>Always</th>
<th>Often</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seminars</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Student group discussions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Lectures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Bedside teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ward rounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Tutorials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Others (specify) ____________________

Please justify your selection _______________________________________

13. What is the grade of cadres who teach/supervise student nurses when delivering care during their clinical area placements?

____________________________________

14. Are student nurses theoretically prepared for the responsibilities assigned to them during their clinical area placement in your ward/unit?

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

If the answer is YES, please give reasons ______________________________________

15. Are student nurses assisted to link theory and nursing practice during clinical area placements?

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

If the answer is YES please indicate what is done

________________________________________________________________________

________________________________________________________________________

If the answer is NO please give reasons.

________________________________________________________________________

________________________________________________________________________

16. Do you make provisions for the teaching and learning of student nurses by yourself or colleagues during their placement in your ward/unit?

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

If the answer is YES, please indicate the provisions

________________________________________________________________________

________________________________________________________________________

If the answer is NO, please give reasons:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
17. Were you adequately prepared to supervise/teach student nurses?

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

If the answer is **YES** please state what was done:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

If the answer is **NO** please state what you would want to be done:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

18. Is guidance and support given to ward/unit sisters by the nurse teachers to assist the teaching and learning of student nurses during their clinical area placements?

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

If the answer is **YES** please state what is done.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

If the answer is **NO** please give reasons.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
19. How do you rate the communication between the school of nursing (Nurse Teachers) and clinical area staff?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>1</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
</tr>
</tbody>
</table>

a. Please justify your answer:

______________________________________________________________________

______________________________________________________________________

b. Please suggest how the communication can be made more effective:

______________________________________________________________________

______________________________________________________________________

20. Please suggest how study blocks and clinical area placements can be improved to enhance the teaching and learning of student nurses.

a. Study Blocks

______________________________________________________________________

______________________________________________________________________

b. Clinical Area Placements

______________________________________________________________________

______________________________________________________________________
APPENDIX 4:

DRAFT PLAN FOR THE NATIONAL GENERAL NURSING BLOCK SYSTEM
APPENDIX 4

Draft Plan for The Diploma in General Nursing
Using
The Block System in Schools of Nursing in Zimbabwe

4.1 BACKGROUND
The aim of nurse education is to produce competent professional nurses who are trained to provide comprehensive health care (preventive, promotive, curative, rehabilitative) to patients/clients in any health care setting in Zimbabwe.

4.2 THE BLOCK SYSTEM
This refers to that system of nurse education wherein the course is divided into sections ("blocks") of theoretical instruction interspersed with sections ("blocks") of clinical experience in the clinical settings.

4.2.1 Study block
This is a period when student nurses attend the school of nursing on a full-time basis for a varying number of weeks for lessons/lectures.

4.2.2 Clinical experience block or clinical area placement
This refers to the period when student nurses are assigned/allocated to a clinical setting on a full-time basis for a varying number of weeks for clinical practice/experience.
THE STRATEGIC GOALS OF THE DIPLOMA IN GENERAL NURSING
BLOCK SYSTEM PLAN IS TO:

- Provide quality education and relevant learning experiences for student nurses so that they can give quality health care to patients and clients after they have completed their training
- Provide support for learners
- Motivate learners during the three years when they participate in the programme

4.3 MISSION AND VALUES

The mission of the schools of nursing is to equip student nurses with the knowledge, skills and attitudes that enable them to give quality health care to patients/clients and to function independently.

The schools of nursing are committed to the following values:

- Student nurses are adult learners who should be respected.
- The learning environment during study blocks and clinical area placements should be conducive to adult learning
- Student-centred teaching methods, which motivate adult learners, should be emphasised by all nurse teachers.
- Student nurses should be assisted to learn during study blocks and clinical experience blocks. The programme should focus specifically on student nurse learning needs.
- Student nurses should be involved in the evaluation of the course during study blocks and clinical area experience periods.
- The block system plan should comply with the provisions of:
  1) Health Professions Council General Nurse Training Regulations
  2) General Nurse Training Policy
4.4 STRUCTURE OF THE SCHOOL OF NURSING

- The staff structure of each school of nursing will comprise of the following posts:
  - Principal Tutor/Lecturer
  - Deputy Principal Tutor/Lecturer
  - Senior Tutors/Lecturers
  - Tutors/Lecturers
  - Clinical Teachers/Clinical Instructors

- The school of nursing should be autonomous (i.e. independent of hospital control) and should fall under the control of the general education system (Ministry of Higher Education). This will enable student nurses to have supernumerary status during clinical placements.

- The school of nursing will have associate status with a university. There will be progression to affiliate status. The long-term plan is for schools of nursing to become colleges or universities, which offer degree programmes.

- The long-term plan is also to have one grade of nurse teacher/lecturer. The clinical teacher (clinical instructor) grade will be phased out so that the nurse teachers/lecturers will be responsible for the classroom teaching of theory and clinical procedures as well as teaching and assessing student nurses during clinical experience/placements.

4.5 PERSONNEL

- More nurse teachers have to be employed until there is a minimum student-teacher ratio of 1:25. This will enable nurse teachers to assist slow learners and increase the interaction between themselves and student nurses.
• Clinical areas will be adequately staffed with professional nurses who are willing to teach student nurses.
• Regular meetings will be held between nurse teachers and clinical supervisors every month to discuss and review the teaching and learning of student nurses.

4.6 Continuing education
In-service courses or workshops will be conducted for nurse teachers and clinical supervisors on topics, which will include the following:
• Orientation on the block system of nurse education, the roles and functions of nurse teachers and clinical supervisors within the block system
• The art and skill of teaching and assessing for all new nurse teachers and new clinical supervisors (a clinical assessor’s course)
• New trends in nursing for clinical supervisors
• Innovative teaching strategies for nurse teachers
• Creation of an environment conducive to learning for nurse teachers and clinical supervisors

4.7 STUDY BLOCKS
4.7.1 Block content
Strategies to reduce block content will be implemented as follows:
• The study block period will be lengthened from 8 to 10 weeks (first year block 1 and 2, second year block 1 and 2).
• The curriculum will be revised or long and short subjects will be mixed, for example, medical nursing and paediatric nursing, surgical nursing and obstetric nursing.
• *Only* the principles in specialist topics will be taught, for example, urology.

• Group work will be provided to teach rare or uncommon conditions.

**Resources**

• The library will be stocked with relevant up-to-date reference and textbooks.

• The school of nursing will be provided with adequate audio-visual teaching/learning aids including overhead projectors, television and videos, slide projectors, models and charts.

4.7.2 Teaching

• Nurse teachers will use *student-centred teaching methods* such as, group discussions, problem solving, projects and group work in the entire three-year programme.

• The formal lecture teaching method will only be used for teaching new information and knowledge to student nurses.

• Each student nurse will be given time for return demonstrations of nursing procedures that are demonstrated.

• Student nurses will visit wards with the nurse teachers after covering major common topics such as, pneumonia and congestive cardiac failure, so that what they learn in classrooms may be observed in practice in the wards.

• Study periods will be provided on the weekly timetable for student nurses to do independent work.

• All group work topics will be presented and discussed under the guidance of the nurse teacher.
4.7.3 Evaluation

- Tests will be given during the teaching of various subjects.
- End-of-block examinations will be written at the end of each study block.
- Student nurses will evaluate each study block's activities.
- Their teachers will give student nurses feedback after they have marked their end-of-study block examinations.

4.7.4 Clinical allocation/placement

- The clinical allocation of student nurses will be organised according to the student nurses’ learning needs and not the hospitals’ staffing needs.
- Allocation will be made in accordance with the content that has already been covered in study blocks.
- Allocation to clinical areas will be made for a minimum of four weeks.
- Clinical supervisors will be informed about the level of student nurses’ knowledge and the objectives that they have to achieve during each clinical placement at least one month before student nurses are allocated to the clinical area.

4.8 CLINICAL AREA PLACEMENTS

4.8.1 Clinical teaching and learning of student nurses

- There will be pre-planned clinical teaching programmes for student nurses by nurse teachers, clinical teachers, ward sisters and professional nurses working in the units/clinical areas.
- Ward sisters and professional nurses working in those areas will carry out clinical teaching on patients in the unit.
- Essential procedures/competencies will be supervised and signed for by ward sisters and professional nurses.
• Each student nurse will do a case presentation once every two weeks.
• Student nurses will write a case study in each clinical area placement.
• Ward sisters and professional nurses will teach student nurses, conduct follow-ups and assessments.
• There will be set times every day during which ward sisters and professional nurses will teach student nurses.
• All levels of student nurses will participate in doctors’ and matrons’ rounds.
• Student-centred teaching methods (such as ward rounds, case presentations, tutorials, case studies and demonstrations) will be used in the teaching and learning of student nurses.
• Nurse teachers will conduct a clinical teaching session for each student nurse at least once between study blocks.
• Nurse teachers will conduct student nurse assessments in the clinical areas.
• Clinical teachers/instructors will conduct a clinical teaching session at least once for each student nurse allocated to their areas.
• Clinical instructors will conduct follow-ups and assessments during clinical area placements.
• Student nurses will evaluate each clinical area placement.

4.8.2 Responsibilities of student nurses
• Student nurses will be given opportunities to practise procedures and prepare for assessments.
• Student nurses will not be assigned to do procedures, which they have not been taught.
• Student nurses will not be assigned to do non-nursing tasks, such as errands.
4.8.3 Off duties for student nurses

- Student nurses will have straight off duties and not split off duties, such as 12:30 to 16:00 hours off duty.
- Student nurses will not have more than one set of night duty per clinical area placement.
- Student nurses will not compensate for staff shortages.

4.9 EVALUATION OF THE BLOCK SYSTEM PLAN

The block system plan will be evaluated during its implementation and after the first graduates have completed their training in order to identify any further areas of improvement in the education and training of student nurses.
APPENDIX 5:

REQUEST FOR PERMISSION TO CONDUCT THE STUDY IN HARARE HOSPITAL
3 February, 1998

Harare Central Hospital
P.O. Box ST 14
SOUTHERTON

Dear Sir

Re: Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

JOSEPHINE CHIWARE
Principal Tutor
APPENDIX 6:

REQUEST FOR PERMISSION TO CONDUCT THE STUDY IN MPILO HOSPITAL
3 February, 1998

Dear Sir

Re: Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

JOSEPHINE CHIWARE
Principal Tutor
APPENDIX 7:

REQUEST FOR PERMISSION TO CONDUCT THE STUDY
IN UNITED BULAWAYO HOSPITAL
Dear Sir

Re: Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

JOSEPHINE CHIWARE
Principal Tutor
APPENDIX 8:

REQUEST FOR PERMISSION TO CONDUCT THE STUDY
IN MASHONALAND EAST PROVINCE
The Provincial Medical Director
Mashonaland East Province
P.O. Box 10
MARONDERA

2nd February 1998

The Provincial Medical Director
Mashonaland East Province
P.O.Box 10
MARONDERA

Dear Sir

RE: PERMISSION TO CONDUCT A STUDY ON THE BLOCK SYSTEM USED IN STUDENT NURSE TRAINING

I am asking for permission to conduct a study into nurse education. This will involve administering questionnaires to community health nurses who supervise student nurses during their community health nursing experience. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme.

I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

Josephine Chiware
PRINCIPAL TUTOR
APPENDIX 9:

REQUEST FOR PERMISSION TO CONDUCT THE STUDY
IN PARIRENYATWA HOSPITAL
3 February, 1998

Dear Sir,

Re: Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully,

JOSEPHINE CHIWARE
Principal Tutor
APPENDIX 10:

PERMISSION TO CONDUCT STUDY
HARARE CENTRAL HOSPITAL
Harare Central Hospital  
P.O. Box ST 14  
SOUTHERTON

9 February 1998

Josephine Chiware  
Principal Tutor  
Parirenyatwa School of Nursing  
P.O. Box CY 198  
CAUSEWAY

Dear J. Chiware

RE : PERMISSION TO CONDUCT A STUDY ON THE BLOCK SYSTEM USED IN STUDENT NURSE TRAINING

Your letter dated 3 February 1998 refers.

Permission has been granted to you to conduct a study on the Block System used in Student Nurse Training at Harare Central Hospital School of Nursing. Would you please submit your proposed protocol.

Please send a copy of your findings as soon as you are through with your research to my Secretary, Mrs P. Maravanyika.

Yours Sincerely,

Dr M.Y. Ali  
MEDICAL SUPERINTENDENT  
/pm

cc. 1. Ms Chiutsu - H.S.A  
2. Ms Bvukumbwe-Zindove - P. Tutor - School of Nursing  
3. Ms Dube - P. Tutor - School of Midwifery
APPENDIX 11:

PERMISSION TO CONDUCT STUDY
MPILO CENTRAL HOSPITAL
3 February, 1998

The Medical Superintendent
Mpilo Central Hospital
P.O. Box 2096
Bulawayo

Dear Sir

Re: Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

JOSEPHINE CHIWARE
Principal Tutor

/P.T.S.
APPENDIX 12:

PERMISSION TO CONDUCT STUDY
UNITED BULAWAYO HOSPITAL
School of Nursing  
Parirenyatwa Hospital  
P O Box CY198  
CAUSEWAY  
HARARE

3 February, 1998

The Medical Superintendent  
United Bulawayo Hospitals  
P.O. Box 958  
Bulawayo

Dear Sir

Re:  Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

JOSEPHINE CHIWAWE  
Principal Tutor

Permission to carry out the study is hereby granted.
APPENDIX 13:

PERMISSION TO CONDUCT A STUDY MASHONALAND
EAST PROVINCE
REF: A/51/3

9th February 1998

J. Chiware
School of Nursing
Parirenyatwa Central Hospital
Box CY 198
CAUSEWAY
HARARE

RE: PERMISSION TO CARRY OUT A STUDY ON THE BLOCK SYSTEM USED IN STUDENT NURSE TRAINING

Reference is made to your letter dated 02/02/98 concerning the above.

Permission has been granted to you to carry out your study. By copy of this letter the Tutors at all schools of nursing is hereby notified.

Good luck !!!

Dr E.T. Mabiza
PROVINCIAL MEDICAL DIRECTOR – MASH EAST

c.c. All Schools of Nursing- Mash East

/em
APPENDIX 14:

PERMISSION TO CONDUCT STUDY
PARIRENYATWA HOSPITAL
3 February, 1998

The Medical Superintendent
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

Dear Sir

Re: Permission to Conduct a Study on the Block System used in Student Nurse Training

I am asking for permission to conduct a study into nurse education. This will involve interviewing a number of tutors, clinical instructors, sisters-in-charge and student nurses. This will not disrupt the normal functioning of the hospital work. The study aims to find out the views of student nurses and their supervisors regarding the block system which is used in the general nurse training programme. I hope that the results of the study will benefit nurse training and patient care.

Thanking you for your support.

Yours faithfully

JOSEPHINE CHIWARE
Principal Tutor

Permission granted

JOSEPHINE CHIWARE