NURSES' PERCEPTIONS OF PATIENTS IN THE
NURSING PROCESS: A STUDY OF TWO CARDIOThorACIC UNITS

by

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Ph.D. Thesis
University of Edinburgh
1992
This thesis is dedicated to the nurses and patients who participated; to my darling Mike and to all those who care.

"Oh wad some Power the giftie gie us
To see oursel's as others see us"

(Robert Burns).
I hereby declare that this thesis has been composed by myself, that it has not been accepted in any previous application for a degree, that the work of which it is a record has been conducted by myself and that all quotations have been distinguished and specifically acknowledged.

Bernice JM West
1992
ACKNOWLEDGEMENTS

When undertaking a doctoral degree there are many people who contribute to the development of the ideas either wittingly or unwittingly. This thesis owes much to the many student nurses, patients and professional colleagues who over the years have challenged me and commented on various aspects of nursing care.

Foremost amongst these people are Wilma MacPherson, Mary Watson, Alison Paterson, Josie Burnett, Gillian Reekie, Irene Hudson, Betty Lawson, Pat Law, Andrew Foote, Donny Ross, Davy Gove, Steve Brockman and Armida Taylor. They have enabled me to take risks and become totally involved in nursing.

The financial cost of producing the thesis would have been an additional personal burden without the generous grants awarded by Grampian Health Board, The National Association of Theatre Nurses and The National Board for Nursing, Midwifery and Health Visiting (Scotland). I wish to thank each of these institutions for their financial support.

Bibliographical help is a must in a task of this magnitude. The assistance and support of Maureen Jaffray, former Librarian at Foresterhill College of Nursing, Aberdeen has been invaluable in keeping me informed.
The formal mechanics of a Ph D require the student to be supported within the awarding University. Rosemary Weir and Maureen MacMillan have not only given this support but have also empowered me to develop the ideas and produce the final version. Their personal support, conscientious reading of numerous drafts and formal guidance have been very much appreciated.

There are always special people who rescue you when you are about to sink either intellectually or emotionally. For me there have been five such people.

Norman Wetherick perceived the burdens of method and construed a clearer pathway. Pauline Curran and Fred Nimmo made sense of the statistical analyses. Ruby Heath mastered the follies and idiosyncracies of the word processor and typed the thesis.

Finally, and most importantly, this thesis would not have been possible without the love, support, encouragement and confidence-building of Michael Lyon. He rescued me from intellectual confusion, emotional desperation and the sheer demands of the job. Throughout the thesis from conception to final product his wisdom and love have guided me. Thank you Mike.
ABSTRACT

This thesis is concerned with the actual process of nursing in two major and distinctive cardiothoracic units in Scotland. In order to understand the nursing process the research has been designed to investigate nurses' perceptions of real patients.

A methodology has been developed in order to analyse nurses' perceptions of patients whilst actively engaged in care. Personal Construct Theory (Kelly 1955) is proposed as providing an appropriate conceptual framework for the investigation.

The elicitation of nurses' perceptions in the Pilot study yielded a set of common perceptual constructs which were then standardised and tested in the Main Study. From interviews with nurses who care for the same patients but in four distinctive clinical settings: the operating theatre, the recovery room, the surgical ward and the intensive care unit, a data-set was obtained which on analysis indicated that specific environmental, medical, social and psychological criteria influenced nurses' perceptions and the nursing process.

The conclusions drawn from the study have implications for the development of the nursing role, the delivery of care and the analysis of the nursing process in general.
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CHAPTER 1

Background to the Study and the Problem for Investigation
1.0 **Introduction**

Within nursing, the decade of the eighties was a time of development and change which provoked nurses to think about their own practice within the wider contexts of other disciplines. This study aims to conduct a psychological exploration of the nursing process in two Scottish cardiothoracic units.

The present research has originated from a broad interest in the social and psychological aspects of the nurse/patient relationship and how these affect decision-making within the practice of nursing. Previous clinical, teaching and research experiences within the speciality of cardiothoracic nursing have given the author a working expertise in surgical nursing.

1.1 **Background to the Study**

Specifically, the nature of nursing and the quality of the nurse/patient relationship has been of interest to the present author for several years. Eighteen months before commencing this doctoral study a systematic investigation into nursing care was personally carried out. The study was concerned with the implementation of care-planning in conjunction with pre-operative visiting of surgical patients by nurses working in the operating department. The research was conducted in a large teaching hospital over the period of one year and was
used as a preliminary enquiry to the current study.

At that time, (1986) nursing care-plans had been used systematically at ward level for three years. The model of care around which the documentation was designed focused on "activities of living" as described by Roper, Logan and Tierney (1980). In the operating department although patient care had been planned, it was not systematically documented. Generally, at that time, the recording of patient care was still being introduced to British theatre nursing (Leonard & Kalideen 1985 and West 1986a).

Prior to introducing systematic care-planning, the present author carried out a survey of all qualified nurses working within the operating department in order to examine their attitudes towards, and understanding of, the nursing process. The results of that survey indicated that the majority of nurses were sympathetic towards the concepts of assessment, planning, implementation and evaluation of patient care. The nurses understood these concepts in terms of the job they were doing. The practice of recording nursing care using the language and stages of the 'nursing process' was described, however, as being stressful by the majority of nurses.
At this stage there was a confusion about the nature of the nursing process, both in the nursing literature and in the surveyed nurses. Was it the practice of nursing or the documentation of nursing care? The documentation of care for many constituted the 'nursing process' (West 1986b). Studies by Farmer (1985) and Hayward (1986) also indicated that the 'nursing process' was being understood only in terms of care documentation and recording.

Since professional concerns were associated with the recording of nursing care, the following procedure was adopted in order to attempt to evaluate and identify particular difficulties associated with the introduction of systematic care-planning in the operating department. First of all, educational discussions were conducted. These were based on the guidelines set out in the World Health Organisation Report of 1981. The sessions focused on communication and problem-solving skills and were designed for all nursing staff.

At the same time a research project was designed which utilised a quasi-experimental mode of investigation. (Prior to commencing the study ethical approval was obtained from the appropriate Joint Ethical Committee). This preliminary investigation used the following design. A sample of patients was randomly selected from those
elective cases undergoing major thoracic or cardiothoracic surgery. The experimental group of patients were specifically visited pre-operatively by a theatre nurse. In addition a control group of patients was identified who would receive the 'normal' pre-operative preparation.

Each visited patient was given information regarding the proposed surgery, expectations of pain and the recovery process. At this stage the opportunity was given to the patient to ask the visiting nurse any questions. By interviewing the patient and by consulting the relevant nursing care-plan and medical notes, the theatre nurse then documented her initial assessment of the patient.

Thereafter, each successive stage of care-planning was completed whilst the patient was in the operating department. On the third post-operative day (or later if the nature of the surgical intervention required delay) the patient was visited by the same theatre nurse who had completed the initial assessment. A structured interview which explored the patient's experiences was carried out and recorded. The patients allotted to the control group, on the other hand, were only interviewed post-operatively on their experiences of care.

The results obtained from this project supported the
findings of Hayward (1975), Boore (1978) and Morris, Goddard and Roger (1989). The research showed that patients who were visited by nurses prior to surgery benefited in certain respects. Firstly, those who were deliberately given information about how much pain to expect post-operatively actually required and received less intramuscular analgesia during their post-operative care.

Secondly, those patients who were experimentally visited appeared to understand more about the recovery process in the short and long-term. Thirdly, the visited patients reported that they did not feel over-anxious about hospitalisation. Other results obtained indicated that both sets of patients received support and relied heavily upon their families and other patients for care both before and after surgery. The nurse was only significant in the post-operative care and then only for the first three days after surgery.

Nurses' recordings of patients' progress, and the care which they gave were examined carefully. A strangely uneven pattern began to emerge between the recordings. It was shown that in certain care-plans all "activities of living" (Roper, Logan & Tierney 1980) were assessed, but many problems identified were not carried into the care-plan. Furthermore some care-plans gave detailed
information on the patient's progress and about what nursing care was carried out; whereas other plans contained little or no information about progress, nursing care or recovery expectations. These latter care-plans were devoid of detailed nursing care.

In addition, the patients whose care-plans were more comprehensive and complete, also commented positively on their experiences of hospitalisation, whether part of the experimental or the control group. Close observation and assessment suggested that there did not appear to be marked differences between individual nurses in their actual ability to record care. The nurses were familiar with the "activities of living", and the concepts of assessing, planning, implementing and evaluating nursing care. The most plausible hypothesis to explain variation was that there appeared to be differences in application of the model, in the recording of care and in direct patient experiences of care.

From anecdotal data collected at this juncture there appeared to be marked perceptual variations by nurses:

- in the identification of patients' needs and nursing problems.
- in the nature of the nurse/patient interaction.
- in the perceptions of patient care by theatre nurses compared with ward nurses.
- in the nurses' understanding of the psychological care requirements of some cardiothoracic surgical patients.

Whilst there appeared to be many variations observed there also emerged common features of care-planning and in the prioritising of care. These were observable for particular nurses who seemed to be occupationally similar but who were not necessarily working together. From these first observations and from personal clinical experience a wish to explore these issues further began to emerge.

1.2 **Introduction to the Problem for Investigation**

In addition to being an experienced surgical nurse, the present author also has an academic background in psychology. From a stance of the blend of these two knowledge bases, there developed a concern to understand social relationships in a care setting. The professional and social judgements made by nurses and the importance of these within the process of nursing have become the focus of considerable personal academic interest. With this background knowledge and interest the present study was designed. The plan was to explore some of the psychological processes which influence nursing-care in cardiothoracic settings.
The nursing process advocates that the nurse assesses, plans, implements and evaluates care. This standard of decision-making is laudable and has advanced the profession of nursing in general. The nursing process as described in the literature, however, is not necessarily synonymous with the practice of nursing. The literature contends that the process of nursing is concerned with professional decision-making in a therapeutic relationship.

By recognising that nurses plan care and often work autonomously, the explanation given by the nursing process as described by Yura and Walsh (1978) has enabled the ideals of practice to be articulated. In practice, however, the ability to carry out each stage of the process is more complex than it appears from the theories of nursing.

When considering theories of nursing then, it can be argued that each model or theory of nursing aims to identify a distinctive nursing process. Thus, as Fawcett (1992) argues, the process of assessment, planning, implementation and evaluation is provided with a distinctive format and context by a particular conceptual model of nursing.

It is necessary to understand the key philosophical bases
of influential nursing theories in order to appreciate the various processes of nursing. By doing so the nurse ideally can select the optimal theory and the appropriate process of nursing to suit the health care requirements of a particular patient. For although nurses are educated as expert and self-responsible professionals, and are encouraged to adopt a problem-solving approach to nursing care, there appears to be a dichotomy between the ideals of theory and the actuality of nursing practice.

Sheehan (1990) investigated the established meaning of the term 'nursing process' and concluded that there was not a shared view amongst nurses of what constitutes the 'nursing process'. By surveying the teaching staff of nursing schools and colleges Sheehan discovered that there were common themes about the 'nursing process' which were always taught: such as the importance of problem-solving and individualised care. He also found difficulties in clinical practice which prevented the implementation of the 'nursing process' as taught. These were identified as being the existence of staff shortages, the burden of extra paperwork, and the rapid turnover of patients. The latter is of special interest to the present author in that this factor has been identified as relevant to cardiothoracic nursing.

The fact that there is considerable variation and
understanding of the nursing process amongst nurses is to be expected in practice. For nursing is essentially a therapeutic activity involving a relationship between at least two individuals. If a psychological analysis were to be carried out on the nature of the nursing process (as with any other interpersonal relationship) then it would be reasonable to obtain a diversity of understandings. This leads to the possibility that there is not one nursing process but several. For, after all the psychodynamics of given situations may well vary according to the perceptions of the actors and the social inferences that can be made (Fiske & Taylor 1991). In cardiothoracic surgery the same patient encounters successively different clinical contexts during hospitalisation. Many different actors participate in care and numerous social and professional judgements and inferences are made.

1.3 The Clinical Focus for the Study
The particular clinical speciality of cardiothoracic surgery was chosen for several reasons.
1. It represents a microcosm of nursing. By locating the study within cardiothoracic surgery a unique perspective which integrates multi-phase processes of nursing can be studied.
2. When the processes of care-planning and
decision-making are considered then it is important to
ask what difference the clinical context makes to the
nurse's priorities for care. Within the speciality of
cardiThoracic surgery there are generally four main
clinical contexts which are visited by the patient
during his or her hospital career:—the surgical ward;
the operating theatre; the recovery ward and the
intensive care unit.

3. CardioThoracic nursing, in many respects, is special
because of the intensive nature of care and the high
symbolism attached to the surgery by health
professionals and the general public alike.

4. It is also, however, typical of many surgical care
settings in that patients progress rapidly through the
stages of hospitalisation towards recovery and
normalisation.

5. The focus of care often combines knowledge of
oncology, medicine and surgery.

6. Within cardiothoracic surgical settings the
requirements of patient care demand a high degree of
technical skill as well as interactive ability on the
part of the nurse. Consequently the nursing staff
need to be multi-competent and sensitive to the
practice of their skills.

7. The author already had clinical, managerial,
educational and research experience in this area.
1.4 Relevance of the Problem to Nursing

The importance for clinical nurses, educationalists, and researchers to examine, and maybe resolve, discrepancies between the theory and the reality of nursing has been stressed in the literature over many years (Gray & Pratt 1991). The three professional groups have accepted this responsibility to a certain extent at the levels of professional prescriptions and nursing practice.

There has been less emphasis however on the analysis or precise assessment of how the nursing process works in clinical practice. Developments in nurse education, the employment of project teams, joint appointees and clinical nurse specialists have each assisted in the integration of complex ideas into nursing practice. The systematic testing of nursing theories in practice by researchers has received less attention. In addition there has been very little research into the nursing process in clinical settings.

The current study has investigated the process of nursing from a psychological perspective; by identifying the ways in which nurses perceive cardiothoracic patients in their care. Thereby providing an analysis of how the nursing process actually works in practice.
1.5 **Conceptual Framework for the Study**

To conduct such a study, various methods from within the discipline of psychology were considered. From the beginning it was seen as being important to elicit from nurses their perceptions, ideas and constructions about patients currently in their care. At the same time it was also necessary to obtain information from these patients about their hospitalisation. For these reasons it was decided to use Personal Construct Theory (Kelly 1955) as the theoretical framework for the study. This theory of social perception and cognition has enabled the present author to examine some of the complexities of nursing practice.

1.6 **The Research Aim and Questions.**

The primary aim of the research was to carry out a psychological explanation of the nursing process in cardiothoracic settings. With this aim in mind a series of specific research questions were formulated. The following hypothetical questions were designed to identify what social and professional factors influenced nurses' perceptions and their decision-making.

1. Are there common professional perceptual constructs used by nurses who are involved in caring for cardiothoracic surgical patients?

2. Does the working context have any bearing on nurses' perceptions of these patients?
3. Do nurses working in a particular context perceive the same patients similarly?
4. Is there any connection between the nurse's perception of the patient and the patient's diagnosis?
5. Is there a connection between the nurse's perception of the patient and the patient's age and sex?
6. Do nurses perceive patients in terms of the physical care they require?
7. Do nurses perceive patients in terms of the psychological care they require?
8. Does the previous experience of the nurse have any bearing on how s/he perceives patients?
9. Does the educational background of the nurse have any bearing on his or her perception of patients.
10. Do nurses' perceptions of patients' care correspond to patients' perception of care?

1.7 The Scope, Approach, and Limitations of the Study
In research into nursing there are two main paradigms which are generally utilised: the positivist and the interpretative. This present study which is concerned with the integration of theory and practice in cardiothoracic nursing has utilised the interpretative paradigm in its broadest sense in order to explore the psychology of the nursing process.
In this study theories of social cognition have been used as a framework to understand the practical activities of the nursing process. Research using such a phenomenological approach, is able to explore forms of knowledge not generally accessible within the positivist paradigm. Whilst this is advantageous in terms of understanding human relationships it does mean, however, that without further work the findings are not generalisable. Consequently the research design which has been adopted lends itself to replication in other clinical contexts for the findings to be extended and tested.

The rapid pace of change within the Health Service and the expansion of cardiothoracic services since the data were collected has had a limiting effect upon the findings of the study. Each of the hospitals studied has altered management structures and redeployed manpower resources. These have resulted in an increase in specialisation of services and an investment in new plant. Consequently some of the findings pertaining to specialisation may now be the same for both hospitals.

Roper Logan and Tierney's "activities of living" (1980) were used by nurses to plan care in each hospital. This practice has imposed a limitation on the study. If a different conceptual approach to nursing had been used
then the nurses’ perceptions of patients may have been different.

The sample of nurses and patients chosen cannot be considered as representative of all nurses and all patients. Indeed, each sample group was deliberately selected in such a way as to reflect the patient and nurse population at the time of study in the cardiothoracic units. In addition, two distinct units were chosen deliberately in order to attempt to determine what variation in the process of nursing there would be at the extremes, e.g. an established centre of excellence; and a newly-funded embryonic centre.

The limitations of the study relate to the methodology chosen for the investigation. The results obtained indicated differences between sample populations. By approaching the study of the nursing process from a psychological perspective the author has been able to demonstrate individuality and commonality of findings in detail. Full replication of this study, however, in other surgical specialist centres is necessary. By replicating the study the findings relating to: the effects of specialisation; the effects of working context; the distinctiveness of graduate nurses; the significance of type of surgery performed upon construing; and the commonality of construing amongst
nurses can be tested.

1.8 The Assumptions of the Study

It is necessary to explain exactly what is meant by the term cardiothoracic unit. For present purposes there are two pertinent meanings. The first relates to the Administrative Cost Unit within a particular hospital. In this administrative meaning of cardiothoracic surgery the collective costings cover the plant, manpower resources, and the equipment which are dedicated to this type of surgery. Generally four clinical environments are involved: the cardiothoracic surgical ward; the operating theatre; the recovery ward and the intensive care unit.

Secondly, the cardiothoracic unit is the working unit of analysis of the present study and as such has special meanings pertaining to the hospital career of the patient. The progression of the patient through the various clinical environments has particular significance to this psychological study of the practice of nursing. In each environment the patient is cared for by different nurses. The design of the study is such that it has allowed each stage of the patient's hospital career to be explored in terms of the nurses' perceptions of that patient and their priorities for care.
Three other premises underlie the author's approach to the problem. Firstly, the nursing process involves several decision-making processes. At each stage of patient care information is assimilated by the nurse and consequent actions are planned. From a psychological perspective several factors influence this decision-making process and consequent social interaction. This study has been designed to identify some of these contributing factors.

Secondly, nursing is essentially a therapeutic activity involving two or more people. The stages of the nursing process and patient assessment based on activities of living require that a nurse makes decisions, inferences and judgements about patient care. How these decisions are made in practice and how care requirements are prioritised are crucial questions in any analysis of the practice of nursing.

Thirdly, in the practice of nursing the individual nurse construes patterns of care based upon the anticipation of events and specific outcomes. Normative theories of decision-making suggest that there are optimally correct ways of making decisions by means of gathering information, sampling that information and combining the information in a prescribed logical order. Within the literature, decision-making in the practice of nursing is
described in similar normative terms. It is contended, however, that when the actualities of nursing practice are examined, the nurse's ability to draw social inferences and form judgements about patients' needs is influenced by particular environmental contexts and social-psychological considerations. Decision-making in the process of nursing is not as obvious or self-evident as theories of nursing suggest.

1.9 The Significance of the Study
The importance of this study of nursing is that it will systematically develop a research methodology suitable for the study of active nursing; provide a psychological analysis of the process of nursing; identify areas for staff development; and produce research findings which can be tested in other clinical environments. In addition the empirical findings will also, if less precisely, have relevance for policy goals.

1.10 Structure of the Thesis
In the following chapter the relevant research literature is reviewed. Literature covering the nursing process and its relationship to models of nursing, care planning, and decision-making is considered. In addition pertinent nursing and psychology research into interpersonal aspects of human relationships and nursing practice, especially in the clinical speciality of cardiothoracic
surgery is reviewed.

Chapter 3 sets out the methodological theory and the research design which was adopted. Kelly's (1955) original thesis is expounded and recent revisions of the original methodology discussed. Consideration is given to the cognitive analysis of other professional, occupational, or identifiable groups for comparative purposes. This appraisal aids the appreciation and development of various schemes of revision which can be improved for purposes of investigating the perceptions and interactions of a professional group.

A theoretical and conceptual framework is formulated so as to be capable of taking cognizance of recent developments in nursing. An appropriate methodology for investigating nurses' perceptions of patients whilst actively engaged in the nursing process is set out. Kelly's (1955) Personal Construct Theory is identified as the basis for conceptual analysis. The mechanics of Role Construct Repertory Testing are discussed in order to identify the challenge of such an approach for eliciting perceptual constructs from nurses - with the further aim that they should be standardised fully and then tested in other areas.

In Chapter 4 the data obtained from the elicitation and
validation of perceptual constructs are presented, analysed and discussed. From these results a set of perceptual constructs was standardised and used in the Main Study. In addition the other research instruments which have been developed were also tested. These include a questionnaire designed to collect preliminary biographical data from nurses and a more detailed interview schedule which explored patients' experiences of care.

Chapters 5, 6, and 7 focus on the data analyses and present the findings which were obtained from the Main Study carried out in two Scottish cardiothoracic centres. Consideration is given to the findings from the quantitative data obtained from the nurses' perceptual interviews and biographical questionnaires. In addition the qualitative data obtained from interviews with nurses and patients are also presented. The four data-chapters represent an analysis of the process of nursing from within.

Chapter 8 concludes the data analysis by a discussion of the findings. This discussion is carried out by comparing and evaluating the data and providing a brief consideration of the nursing implications of the results.

In the final chapter the whole conceptual framework is
revisted in order to establish the theoretical and practical implications of the findings. Recommendations are presented for clinical practice, education and future research.
CHAPTER 2

Approaching Nursing in Theory and Practice:
Establishing the Focus of Investigation.
2.0 Introduction

Nursing requires a commitment to caring for the health of and relating to another individual or a group of people in ways which are both socially demanding and psychologically complex. Various factors may influence the way in which nurses can and do care for their patients. These factors may be environmental, organisational, psychological or a combination of all three. The needs of patients and the role of the nurse in recognising and meeting these needs has been incorporated into several conceptual models of nursing (Johnson 1959a, Henderson 1966, Orem 1971, Lamonica 1979b, Roper, Logan and Tierney 1980) Each of these theories, however, has not taken into sufficient consideration the impact of the clinical environment on the nurse's ability to care, the social and psychodynamic nature of the nurse/patient relationship, or the interpersonal factors in clinical practice which may influence the delivery of nursing care.

In the present study of nurses and nursing it has been important to try and understand more fully not only the technical and interpersonal skills involved in the dyadic nurse/patient relationship but also the social and perceptual judgements made by the nurse. For, it is contended, that interpersonal skills (in relevant respects) are indispensable to good nursing. It is also a
crucial task for nurse researchers and theorists of nursing (who wish to analyse the process of nursing) to explore and understand the dynamics of such skills.

Nursing as a profession has undergone several educational and organisational changes (Briggs 1972, Griffiths 1983, and UKCC 1986). The practice of nursing has also claimed to have changed over the past decade from adopting a task-oriented approach to either using team or primary nursing methods to deliver nursing care. It is necessary to analyse actual nursing care, as practised in particular clinical settings, in order to gain knowledge of any social or professional factors which may influence the practice of nursing.

The reliance on social scientific ideas to determine the nature of nursing has been extremely selective and prescriptive in understanding nursing practice. The focus on the needs of the patient without fully understanding the process of nursing as a dynamic and dyadic relationship have gained most attention and analysis. It is contended that recent advances in the understanding of what constitutes nursing have helped to professionalise nursing, and to develop a systematic approach to nurse education. The quality and nature of patient care and how it is managed in the clinical area has not been thoroughly addressed.
The present study is not primarily concerned with the meaning of the nursing process, as a set of theoretical ideas, or in terms of the history of ideas. Rather it is primarily concerned with an examination of the psychology of the nursing process in the context of actual and practical nursing. The general area of concern is the acute services and in particular the care processes involved cardiothoracic surgery. Consequently pertinent literature which addresses the following topics will be considered in this chapter under the following main headings.

- The concept of the nursing process.
- The nursing process and theory.
- The nursing process and models of nursing.
- The nursing process and care planning.
- The nursing processes and decision-making.
- The nurse in the nursing process.
- Images of patients and illness.
- Psychological aspects of cardiothoracic nursing.
- Nursing attributes and role expectations.
- Education, professional development and the nursing process.
2.1 The Concept of the Nursing Process

In order to define and assess what is meant by the term 'the nursing process', it is proposed to briefly trace the development and formalisation of the concept. The aim is to identify some of the key theoretical contributions which are not only significant in conceptual terms and but are also relevant to the area of contemporary nursing practice under investigation.

To attempt a comprehensive review of the literature from both North America and the United Kingdom would be a major, and in many ways unnecessary, task for the purpose of introducing a study into current nursing practice and patient care. This study aims to bridge the gap between nursing theory and clinical practice by investigating nursing as a social process. For this reason, only the most pertinent literature from nursing and psychology will be considered.

The sample of materials which will be discussed has been chosen by three principal criteria: internal referencing, external representativeness and contemporary relevance. The texts and articles to be examined are the contributions which have been most frequently cross-referenced in the literature and which represent and display a wide consensus of ideas as to how the important
issues in nursing practice can be understood.

In the UK, ideas of nursing as a process, involving inter-related stages of decision-making, did not grow indigenously. It was taken from the USA in the 1970s and then disseminated nationally through various channels. An examination of the professional nursing literature carried out by De La Cuesta (1982) suggests that the nursing process was not really something new. According to her analysis it had definite precursors which prepared the ground (De La Cuesta 1982 & 1983). She argues that, prior to the emergence of the nursing process, nurses were dissatisfied with the existing system of delivering care. In her review of the nursing press of the 1970's she concludes that there were a persistent number of criticisms and proposals for reform from the profession. The principal critical themes of these were a rejection of task orientated nursing; the lack of individualised patient care, the low level of nurse's job satisfaction and the superficial nature of nurse/patient relationships (De La Cuesta 1982).

De La Cuesta (1982 & 1983) fails, however, to take into consideration other precursors for change in nursing practice within the British context. For example, the problem-identification approach for medical records had been recently developed and, from this, nurse-managers
began to adopt a similar approach to nursing records. In addition the Royal Commissions on nursing also recommended a more problem-action approach to nurse education and to nursing practice (Briggs 1972).

The academic concern for an initial move away from task allocation towards a team approach to nursing heralded the start of an articulated dynamic approach to nursing care. Such an approach to nursing care was echoed in the new educational training schemes. The preparation of nursing staff in clinical practice, however, did not match the new ideas (Farmer 1985). Consequently the value of this new dynamic approach to nursing was reduced to paperwork and an administrative chore in many instances. It did not promote the development of meaningful nursing relationships.

From the plethora of literature available it would appear that the diffusion and incorporation of the nursing process was rapid in the British context. By 1977 the General Nursing Council for Nursing, Midwifery (CMB) & Health Visiting had endorsed the incorporation of the concept of nursing as a dynamic and on-going process, into teaching syllabi and educational curricula. In nursing practice, however, fifteen years on, (in 1992), a hiatus still exists, between the conceptualisation of the process and the actualities of practice. A number
of contemporary studies have indicated that the nursing process is not having the desired effect in terms of planning nursing care nor documenting practice (Lawler 1991). Furthermore, according to Richards (1987) and Ferguson, Hildman and Nichols (1987) it has had no demonstrable effect on nursing practice.

The World Health Organisation (WHO 1981) multinational study of the problems encountered in introducing a systematic method for the practice of nursing identified several areas of potential and real difficulty. The aims of the WHO study were; to identify the goals of health services and health disciplines - in particular nursing; to develop nursing practices based on sound principles and knowledge; to move away from a medical model of cure; and finally to improve the content and fundamental approach to nurse education (Farmer 1985).

To aid the introduction of systematic nursing, special units were established and change agents appointed. Such an approach was possible in specific areas of particular hospitals but was clearly restrictive in general for a variety of reasons. Nevertheless the objectives and directives identified in the report could have been utilised in many clinical areas (Farmer 1985). Unfortunately this programme of staff development and change in nursing practice has only been taken up in many
Scottish hospitals since 1990. This has coincided with the government's concern about monitoring professional practices.

Hayward's (1986) report on behalf of the King's Fund illustrated that nurses believed that the nursing process has to be demonstrated through the documentation system only. He argues that the task of completing a plethora of documentation distracts the nurse from her real job of caring for patients. Farmer (1985) also argues that "the structure of the nursing record has received more attention than the content" (p14).

In clinical practice and in education there exists a confusion about what is meant by the term 'the nursing process'. Kershaw (1985) has argued that the adoption of essentially North American cultural ideas into the British context has caused confusion. By drawing attention to the fact that there is a major cultural gap to cross it appears that Kershaw is arguing that the ideas behind the nursing process have not been assimilated into British nursing practice by virtue of the lack of a shared culture. De La Cuesta (1983) states that there is no culture gap to cross and concludes that there may be different interpretations of the nursing process but the result in practice is the same. This conclusion is reached by her without
systematic comparative investigation into practice. Henderson (1982), by contrast, states that the nursing process devalues and denigrates knowledge which nurse clinicians gain from practice. The important issue raised by each of these authors are not the cultural or linguistic anomalies of the nursing process but whether the assumption can be made that the nursing process, per se, is beneficial to the delivery and understanding of nursing care.

At a practical level there often exists a tremendous difference between what care is recorded and what care is actually carried out. Very often attention is given to specific parts of the documentation system while other sections are ignored. Nursing actions and interventions regularly take place with specific patients which may not be reflected in the recording of care. The recent focus of attention on quality of care and the numerous documents which have been produced to assess quality rely heavily on documentation systems for information about care. These monitoring systems assume that the nursing process will be reflected in the records (West 1988 and Kitson 1989)

The nursing process has been lauded by educational authority, professional bodies and experts as being a good way of practising nursing both
scientifically and humanistically (Yura and Walsh 1978 and Lamonica 1979a). The conceptualisation of nursing as a process does represent an important step in the development of nursing practice, management and education. If it is viewed as the systematisation and description of clinical nursing, then there are certainly analytical gains. By such means an understanding of the subject can be reached which in turn can then be transmitted to a large number of people. Due to the explicitness of the ideas similar criteria and standards of nursing care can be developed in various clinical settings. These ideas have in the past year been developed in practice through the Scottish Nursing Standards Project (MacDonald 1991) and the Royal College of Nursing Standards Project (Kitson 1990) where local groups have developed national standards.

2.2 The Nursing Process and Theory
A review of the work of some key nursing theorists will be presented to understand more fully the clinical difficulties encountered when practising nursing as a process. Also this review will allow an appreciation of the advantages and disadvantages in many of the theoretical analyses of nursing.

In the mid 1950's two American nurse educationalists originally posed a theoretical question: "What is good
nursing?" Lydia Hall (1955), in a lecture to the New Jersey Nurses League first proposed a new answer when she suggested that: "Nursing is a continuous process rather than a set of separated actions" (Hall 1955 p151).

A fellow nurse-teacher, Frances Reiter Kreuter, then professor of nursing education at Columbia University, began to define nursing ministrations in ways which were clearly independent of medical directives and required that the nurse began to care for the patient in a more interactive and personable way. These were major changes in the analysis of nursing and provided the foundations of future theoretical approaches to nursing. The definition of nursing as a process was a major step in theory and has supplied the groundwork for subsequent nursing theorists who have built upon social science traditions.

According to Lawler (1991) there are interesting paradoxes in the nursing process. It is essentially a decision-making forms of activity which to a certain extent copies medicine: yet nursing as a profession claims to have moved away from the medical model. It encourages 'the patient' to be reduced to a series of problems on paper. It encompasses scientific positivist approaches to problem solving: yet at the same time supports to be humanistic and concerned for emotions.
(Lamonica 1979b). The assessment strategies which are advocated subject the patient to a range of questioning (which depending upon the theory of nursing used in practice) may be ethically unacceptable. Consequently any application of the nursing process in clinical practice must be selective in terms of priorities for care, the nurses' interpersonal abilities, and the needs of the patient.

Peplau in her pioneer text on "Interpersonal Relations in Nursing" (1952) began to address the importance of selection in the application of the nursing process. She argued that the "then new perspectives on human interaction were especially relevant to the work of nurses" (p.xv preface). These perspectives encompassed particular interactive phenomena which had a qualitative appreciation of patient experiences and nursing actions. Peplau's concern at this time was focussed on the understanding of personality and personhood. In the 1950's idiographic as opposed to nomothetic theories of personality (Adler 1946 and Rogers 1951) were receiving academic attention. Peplau's ideas were very much within this person-focused tradition and whilst still valuable to nursing practice today, the problematic of the psychological approach has moved on. Contemporary social psychological research would now approach nurse/patient relationships with a quest to understand
the perceptual and cognitive processes at work (Davis 1983b, 1984a and Fiske & Taylor 1991).

Orlando (1961) took up the idea of nursing as a dynamic self-directed process in her book entitled "The Dynamic Nurse-Patient Relationship". The argument and ideas contained in this book were developed later by the same author in a key text entitled "The Discipline and Teaching of the Nursing Process: An Evaluative Study" (1972).

In her first book, Orlando suggested that the nurse must distinguish between an understanding of general principles of nursing and those meanings which the individual nurse must discover in the immediate nursing situation in order to help a particular patient. In order to do this, Orlando argued that the nurse must enter into the patient's world and carry out or exercise her professional functions in relation to the patient's needs.

Such an approach to care begins to give a central place to the patient. In the USA, at the same time, the discipline of clinical psychology was expanding a client-centred approach, notably through the work of Carl Rogers in 1951. Many of Rogers' theories about the therapeutic relationship were fruitfully taken up by
Orlando and developed in her later book. In it, she offers instruction on interpersonal skills and analyses their significance in the implementation of the nursing process at the clinical level. She saw the client-centred approach to nursing as essential to the development of nursing as an independent process (Orlando 1972).

Her work takes into consideration the dynamics of the relationship. She provides a model for an interactive process of nursing which has been used in the writings of subsequent theorists (Weidenbach 1964, Henderson 1966, Lamonica 1979b).

When the later literature from nursing theorists is considered it transpires that initial concerns for special features of the therapeutic relationship have been transformed into grander metaparadigms of nursing. Four concepts combined to dominate nursing theory namely, nursing, health, the environment, and man (Riehl & Roy 1980, Fitzpatrick and Whall 1983, Fawcett 1984 & 1992). Amongst theorists of nursing, and from an examination of particular conceptual models there appears to be a consensus of opinion that these are the four fundamental parameters for a nursing philosophy.
The problem of how nursing theory should develop has been well documented. Certain authors have suggested that theory should develop out of the common practices of the clinical nurse (Dickoff and James 1968) while others say that it should develop from scientifically derived understanding about patients' needs (Smith 1981).

Fawcett (1984) states that general models help explain what is taking place in structural terms and therefore conceptual models are useful in understanding health. The problem, however, with particular models of nursing which have been proposed is that the ideas and concepts contained within them belong to the particular nurse theorist's perceptions and understandings of health and are formulated at a macro level. The ideas or perspectives of several clinical nurses or patients apparently have not been included or taken seriously in the development of theory.

It is proposed in this study to incorporate both nurses' and patients' understandings and perceptions, in order to develop an analysis of the process of nursing. The structuralist approach to the development of nursing theory, has in the past, not consider enough the intrinsic aspects of the process of nursing namely, the socio-dynamics and psychology of the relationships
involved.

At a more theoretical level, the similarities of approach and of concepts in nursing models requires critical examination. For example, do the 'activities of living', as expressed by various theorists of nursing, refer to the same phenomena? (Henderson 1966, Roper, Logan & Tierney 1980). As Lister (1991) points out the concepts used need to be clarified and the meaning enhanced if the theoretical basis of nursing is to be fully understood. Furthermore at a linguistic level the terminology used within conceptual models is taken for granted and assumed to be understood by all nurses. Not only is a holistic approach to patient care being advocated but also a generic theoretical basis is assumed.

For the nurse working in the Acute Services the ideology of holism, which is used by many theorists of nursing, poses problems especially when concerned with initial patient assessment. The focus for the nurse in this instance is typically on small parts of the patient rather than the whole. By adopting a specialist mode work can be planned and organised and the patient reassured about the care and treatment to be received.

The advocacy of holistic care has become popular in
recent years in nursing literature. Wilson-Barnett (1988) argues that "individualised care is the greatest cliche of the 1980s" (1988 p. 793). This statement sums up much of the dichotomy which exists between holistic ideas and the reality of hospital based nursing.

Earlier ideas of nursing, which adopted a more functionalist or task approach, protected the nurse by meeting the needs of the service. Over three decades ago Menzies (1960) commented that:

"The nursing service attempts to protect the nurse from the anxiety of her relation with the patient by splitting up her contacts with them. The total workload of a ward or a department is broken down into a list of tasks, each of which is allocated to a particular nurse." (p 96).

Nursing care was planned around specific tasks deemed necessary for the patient and so it was not known where the nurse had failed to meet the needs of the patient.

Many of the nursing theories rely heavily on a scientific positivist approach. On the whole the ideas are received from the natural and social sciences and are often over dogmatic, formalised and precise to exactly represent or reflect the complexity of nursing practice.

Another disadvantage of an abstract conceptual models is that it promotes the idea that all patients can be assessed in the same way. Where a model is adopted in
clinical practice in a rigid way - because it is treated as exemplary - it inhibits and even prevents critical analysis and practitioner questioning of an administrative procedure and its' personal application. Most theoretical models promise much more than can be ever delivered in the caring situation and are therefore hypothetical rather than real.

It is necessary for nurses to ask whether it is administratively advisable or morally right to identify a multitude of problems which will not be dealt with. For good clinical nursing care it is essential to identify the most crucial problem to be dealt with first. The prioritising of care and pragmatic decision-making are vital elements in the process of cardiothoracic nursing.

The ideas of Peplau (1952), Hall (1955 & 1964), Kreuter (1957), Orlando (1961), and Henderson (1966) enable nursing to be understood as a developmental process which is truly patient-centred and rewarding for both parties.
2.3. **The Nursing Process and Models of Nursing.**

Within British literature it has been argued that conceptual models of nursing may serve to establish fundamental differences between nursing and other allied professions. Others claim that the evaluation of particular models may act as a basis for future, nursing research and professional development (Aggleton and Chalmers 1986).

These authors have provided a clear and useful distinction between the definition of a model of nursing and what is meant by the nursing process for the British context. For it would appear that very often these two sets of ideas become confused. At a practical nursing level Aggleton and Chalmers stress that there is a need for nurses to distinguish between conceptual models and the nursing process. The former they define as providing the ideas base from which nursing can be understood. The latter, they define as "a set of guidelines for the planning and delivery of care" (p. 200).

In this thesis the term conceptual model is taken to mean an analytical framework for evaluating and ordering the component parts of professional nursing. Whereas the term 'nursing process' signifies the act of relating to,
and caring for, patients. Here the nursing process is considered to be more than problem solving guidelines. Such a narrow over formal definition, in the past, has led regrettably to the devaluing of the actual process of nursing and the reduction of the acts to administrative accounts.

Aggleton and Chalmers' critique of nursing models is important to understand the nursing dilemma in Britain. They identify the strengths and weaknesses of standard theoretical approaches. Furthermore they emphasise the need for evaluative research of particular models and theories, which may be problematic to the reality of British nursing practice.

The best known and most widely used British model of nursing is that developed by Roper, Logan and Tierney (1980). These authors try to provide a model of nursing based on health and normal activities. It has as its basis the clinical nursing process of care. Conceptualising nursing as a set of activities provides an understandable basis for British nursing. The authors, however, point out that:

the more one analyses these activities of living the more one realises just how complex each one of them is (Roper, Logan and Tierney 1980 p 17.)
In their text *The Elements of Nursing*, (Roper, Logan and Tierney 1980), a chapter is devoted to various aspects of life such as, the biological, the developmental and the social. Notably no comprehensive attention is given to the psychological aspects.

In the biological section the main tenets of the natural sciences are considered and a physiological systems approach adopted. Each activity of living within the model is related to the human biological system. Unfortunately, the British model does not consider pathophysiology or the disease process at all. Tierney (1984) herself has commented negatively on this fact as an omission in the original text.

In the developmental chapter, the focus is on life-span and how the activities of living alter with age and physiological development. The authors appear to have a physiological idea of development which affords no place for psychodynamic development. Finally in the chapter dealing with social aspects of the activities, key sociological concepts are considered such as family education, religion, politics, social class and culture. These are then applied in a general way to the activities of living which ideally should be individualistic. Specific social psychological factors are neither
identified nor considered as relevant.

Roper Logan and Tierney (1980 and 1981) emphasise the daily activities of the patient as being the key by which nursing care should be planned. Their particular approach has integrated the problem-solving approach of the nursing process into a comprehensive framework. This thesis will demonstrate, however, that in practice the model does not have the flexibility or individualistic concerns which are suggested by the authors (1980 and 1981).

The 'activities of living' model was widely used for planning care in the acute services of the hospitals which were selected for participation in this study. In theory, the problem of utilising such a model in acute cardiothoracic surgery should be one of reconciling a health and care focus to a speciality which focuses on the disease process and adaptation to it. In practice, however, it is contended that the problem of being comprehensive and realistic is resolved by a simple ignoring of any psychological aspects of care. This British model is barely concerned with the psychology of the nurse/patient relationship but mainly focuses on the functioning activities of the patient as measures of normality.
In those clinical situations which comprise the focus of this study (cardiothoracic units) actual nursing care is initially planned around those situations of unstable physiology which are a threat to life. The busy atmosphere of surgery makes special demands on both nurses and patients. Decision-making strategies, and the management of care in an environment which is constantly changing require special nursing attributes. Cardiothoracic care requires that the nurse perceives the needs of patients and prioritises those needs to meet the demands not only of the situation, but also the psychological demands of the self.

2.4. The Nursing Process and Care Planning
To appreciate nursing as a process may not be possible by adopting a generic model of nursing. The nursing process is not a framework for nursing per se rather it is a means of understanding the practice of nursing in a variety of clinical settings (Hunt & Marks-Maran 1980). Clinical settings vary considerably and no model available lends itself to operational use in all clinical settings. The discipline of nursing is diverse and specialised and the concepts used to analyse nursing in various clinical, educational or community settings cannot be standardised irrespective of special contexts. For each of these environments makes different demands on both the care-givers and recipients of care. There are,
however, common principles which involve professional standards of social interaction, technical skills and health awareness (Rhodes 1980 & 1985).

Roper (1985) commenting on the wide application of the nursing process as a problem-solving approach to care saw it as merely a method of carrying out nursing but not what comprises nursing. Nursing involves a wide range of skills and knowledge. Relevant parts are drawn upon in the nursing process. The selection and application of particular knowledge and skills is what constitutes the practice of nursing care.

At an operational level of care-planning, ideas about nursing have focused around the assessment stage of patient care in order that all nursing actions can be justified (Crow 1977, Kemp 1984, Beecher 1985, and Faulkner 1985). Nightingale in 1859 stated that the nurse's primary concern must be for the patient who is ill rather than the illness itself. Consequently the nurse must care for the individual in illness, and leave the diagnosis of disease to other professionals. In the theoretical development of the nursing process the idea of making nursing diagnoses has been incorporated (Lawler 1991).

Holloway (1989) states that the patient's diagnosis is
fundamental to the nurse's assessment in critical care settings. She argues that it is only by understanding patients' diagnoses that nursing care can be planned. This approach leaves the nurse treating the illness rather than the patient and is heavily reliant on the medical model of cure for planning nursing interventions. Lewis (1988) argues that it is necessary to prevent the nurse using diagnosis only, and suggests that some typology should be used to help the nurse in the assessment stage of care planning. Henderson's activities of daily living (1966) or Abdellah et al (1960) "21 problems" are the main ones which he suggests have been adapted and utilised by professional authorities in the British context to aid the assessment and planning of nursing care.

The actual implementation of care-planning has been and continues to be viewed as non-problematical. Indeed its application is typically taken for granted in the nursing literature. The transition from the objective care plan to the actual care ministered is in fact assumed. Within the United Kingdom very little operational research has been carried out which identifies the problems involved in carrying out the actual care-plans. Generally theories have not been tested to show if the quality of patient care is affected, either positively or negatively, because nurses are adopting a particular
theory or model; or whether the approach to care advocated is actually practised in the clinical environment.

2.5. The Nursing Process and Decision-Making

A major difference between theorists of nursing and nursing practitioners is that the theorists write about the ideal situation - of how nursing ought to be - whereas the practitioners are more concerned with the reality. Nursing practice in cardiothoracic settings involves a diversity of functional and interpersonal skills in conjunction with a wide knowledge base (Holloway 1989, Cardin and Ward 1989). If nursing is viewed from a functional approach then traditionally sociologists have separated out task-orientated functions and those functions which require an emotional content. Furthermore some sociological definitions of professions state that these two functions cannot be carried out by the same person. Nursing definitions, on the other hand, state that the ideology of nursing requires that these two functions must be met by the same person. Certainly the ideology of the nursing process requires that the nurse cares for the patient in both of these aspects of responsibility (Salvage 1985 & 1990).

The professional duality required in nursing is personally extremely demanding. In the practical
requirements of nursing this duality can be expressed in scientific and humanistic terms. The ability to exercise problem-solving skills and to make informed professional judgements alongside complex social interactions requires the reconciliation of inherent differences in each approach to nursing. This is necessary in order to come to terms with the technical aspects of nursing and the more psychological or emotional aspects of patient care (Rhodes 1985).

The selection of information from social memory and perceptual processing of contemporaneous data in the practice of nursing has not been considered in the nursing literature. How nurses actually make decisions about patient care requirements requires brief consideration at this juncture.

It is contended that the dynamics of clinical environments in cardiothoracic units coupled with the potential speed of physiological change amongst the patient populations do not lend themselves to a normative process of decision-making. For many nurses several factors combine to influence the psychology of their decision-making. This study will identify some of these factors. Furthermore the analysis will also demonstrate that there two basic ways of making clinical decisions: optimal or sufficient to the task at hand.
It has been suggested in research findings that nurses often fail to provide patients with supportive psychosocial nursing care (Peterson 1967). The official policy in nursing practice, especially since the ideals of the nursing process have been influential, has been to care for patients individually and to practise patient-centred nursing. Although nursing now claims to be concerned with each unique patient there is considerable research evidence to suggest that nurses still tend to deal with types of patients and types of medical conditions rather than with individuals (Davis 1984b).

According to the ideology of the nursing process and the humanistic approaches to nursing, nurses ought to be involved in planning purposeful patient-centred care in practice. To do so requires the nurse to enter into an individualised and personalised relationship with the patient. Also, to fulfil the theoretical requirements of the process of nursing in practice, it is necessary that the nurse exercises more autonomy in the patient relationship, is less routine in her observations and care while maintaining a high standard of skill and discretion in both oral and written communication. This results in the emergence of one practical problem. To
fulfil all these conditions the social, professional and health perceptions of the nurse must be more significant in planning care than the ideology of the nursing process either recognises or allows. This leads to the investigation of the key parts of the nurse/patient relationship in the nursing process.

2.6. **The Nurse in the Nursing Process**

Roper, Logan and Tierney's (1980) model of nursing, amongst others (Johnson 1959b, Orem 1980, Rogers 1980), does not assist in addressing the particular problems inherent in developing a relationship (Duck 1992). Rather they assume that the nature and parameters of the relationship are known and accepted by both the nurse and the patient and that role expectations play no part in the development of the relationship. They feel that by providing a theoretical basis around which clinical practice is to be planned a meaningful nurse/patient relationship will automatically ensue.

In practice the idealised version of planned nursing care may cause conflict within the nurse as several factors may mitigate against the ideals being carried out in acute clinical practice. Theories of nursing are, on the whole, concerned with generalisations about nursing care. In practice, however, the particularity of nursing and its inherent relationships, are of concern
both to the caring nurse and the patient. The particular nature of nursing enables the practice of professional discretion and of relevant interpersonal responses. It is no aberration but a beneficial feature of the nursing relationship that perceptual processes and the resultant interpersonal response influence the practice of nursing.

For the individual cardiothoracic nurse, analysis and action should go closely together in the clinical setting. It is therefore important that the researcher investigates the perceptual judgements made and the action taken, by the nurse, for each patient in particular clinical contexts. These issues will be discussed further in the context of this study.

By developing an analysis of personal perception the researcher is able to investigate interpersonal relationships and decision-making in the practice of nursing. For perception (unlike sensation) allows the enhancement of care, interactions and interpersonal skills (Lindsay and Norman 1977). Crucial to nursing in the clinical situation is the relationship between the nurse and the patient (Pearson 1985 and Wright 1990).

In the psychology of perception the modern locus of concern has moved away from studies of sensation towards
the investigation of social perceptions of both people and events (Argyle 1967, Fiske & Taylor 1991). The study of interpersonal perception has been approached from other, previous more established, knowledge in the discipline of psychology. Many specialities particularly the study of memory, (Craik and Lockhart 1972) learning, and attitudes (Bruner & Krech 1968) have all contributed to the knowledge base which constitutes the psychology of social perception.

From the social psychology literature four key components of social perception have been identified (Tagiuri 1968, Tajfel 1968, Argyle, Henderson & Furnham 1985, Fiske & Taylor 1991). These can be summarised as follows.

Firstly, the process of perception enables the individual to structure and organise the world. Secondly, perceptual cues are considered and integrated together in order to make judgements about people or events. Thirdly, associations and causal links are made between perceptions in order to understand what has taken place or what is about to happen. Finally, according to these analyses, the perceiver attributes stability and constancy to perceptions in order to make sense of both events and the behaviour of people.

This understanding of social perception can be seen to fit the processes involved in nursing care. For a
systematic approach to nursing requires that the nurse assesses, plans, implements and evaluates care. This must involve the integration of information about patients and subsequent professional judgements.

Davis (1984) argued that in the nursing process both the nurse and the patient:-

must be allowed some discretion in deciding the nature of the interaction in which they are participating (p78).

The idea of choice for both the nurse or the patient is important. Just as the patient has a right to choose so to does the nurse. The British Professional Code of Conduct (UKCC 1992) requires certain patterns of behaviour from the nurse. But the nurse must be accountable to herself, to the patient and also to the institution. The personal processes at work to resolve this potential conflict are primarily social and psychological. To care effectively for the patient the nurse must be able to construe and anticipate events in order to determine the priorities for care.

Peterson (1967) states that the nursing difficulties associated with the more psycho-social aspects of care are often overlooked. The reason being due to the fact that the norms and values upon which nursing practice is based are not yet fully understood. In her research she
studied three groups of nurses and found that each group had norms and values which were discernable in typical behaviour patterns, characteristics, expectations, beliefs and attitudes. She shows that nurses demonstrated knowledge of psychological nursing concepts but patient care was usually limited to physical nursing. In her particular research, nurses did not respond or seem to notice patients' non-verbal distress.

Peterson's work concluded that there was a need for an operational model of nursing practice which encompassed group dynamics and also took into account the concept that patients in hospitals are usually cared for by nurses rather than a single one. Patient care in specialised cardiothoracic units is organised by a team of individuals each committed to the well-being of the patient. Peterson's study indicated that there were commonalities in nurses' understandings of care. These however, were not specified. If there is a need for a model of nursing which takes group dynamics into account then it is necessary to specify the commonalities of practice and decision-making around which the operational model can be developed.

British nursing research projects concerned with aspects of the nurse/patient relationship have focused on the investigation of specific social skills relevant to
nursing practice. The main areas of concern have been to investigate communication patterns at both the collegiate and patient level. The findings from such work have identified the nurse's use of defensive behaviour to cover over low levels of self-confidence and deal with the communication problems which may be encountered when a nurse tries to assess a patient's social, emotional or informational needs in a clinical setting (Kerrigan 1957, Faulkner 1980, 1981, 1984, Clark 1981, Davis 1981).

Heyman, Shaw and Harding (1984) stated that many of the communication problems identified in the nursing literature did not arise solely from deficiencies in nurses' social skills but, rather, from contradictions and conflicts inherent in the wider social context in which nursing occurs. In clinical practice the nurse has to consider social and peer group demands alongside her own perceptions of the communication needs of individual patients. These factors may combine in such a way as to influence the quantity and quality of communication between nurses and patients.

North American studies have shown that nurses find certain aspects of patient behaviour off-putting and are therefore reluctant to communicate with these patients (Williams and Williams 1959). The expected behavioural
norms which the nurse held were not exemplified by the patient. This may cause conflict within the nurse which in turn according to Williams and Williams (1959) operates to reduce the amount of psychosocial care given.

2.7. **Images of Patients and Illness**

Within the discipline of psychology a considerable literature on the affect of stereotyping on relationships has been produced. In summary these studies have shown that an individual in a Western society may be stereotyped according to age, sex, occupation, class, race or ethnicity (Sherif and Hovland 1961, Fiske and Taylor 1991). From the nursing literature produced it would appear that nurses have stereotypes of patients in their minds (Altschul 1972, Stockwell 1972, Larsen 1977, and Davis 1984b). These nurse/patient stereotypes relate to those identified by social psychologists but in addition medical diagnosis also contributes to the stereotyping procedure.

Over the last two decades several investigations have suggested that nurses classify patients either according to particular criteria perceived by the nurse to be important or significant or according to labels given to patients by people in authority (Altschul 1972, Stockwell 1972, Larsen 1977, Armitage 1980). Such research has
helped to identify key problem areas in nursing and contradictions between nursing theory and nursing practice. When an holistic approach to patient care is adopted in the clinical setting and care is planned around a model of nursing which assumes that the psyche of the nurse is not problematic in the giving of care then contradictions between the theory and practice of nursing will arise.

Morimoto's early work (1955) shows how stereotyping can have positive or negative effects on nursing care. This research stated that nurses care for "non-preferred" patients in a business-like fashion, meeting only immediate physical needs. The preferred patients received individualised care which was designed to meet the assessed physical, social and psychological needs of an individual patient. Also following similar lines of enquiry Davitz & Pendleton (1969) suggest that young patients were being perceived by nurses to be suffering more than older patients and consequently were receiving preferential treatment.

Research has shown that some nurses said that all patients were liked (Anderson 1973). The work carried out by Stockwell (1972) indicated that nurses found it difficult to articulate what they didn't like about particular patients. Miller (1979) argues that few
nurses can be detached about their attitude towards their patients. She states that when asked their responses tend to reflect what they believe they should say rather than what they really think and feel (p1929).

By using a phenomenological approach to the problem it is proposed to investigate the actual perceptions of real patients and thereby overcome the fear of retribution identified by Miller (1979).

Larsen (1977) stated that:–

In the health care setting, perceptions may be influenced by the characteristics of the patient, the interaction situation and the nurse. (p466).

This research investigated particular patient characteristics which may affect nurses' perceptions. She was particularly interested in whether the patient's age, social class or diagnosis had any influence on perceptions. In order to carry out the research, patient histories were fabricated and presented to two comparable groups of nurses. When presented with a case a case vignette the nurses were asked to provide health teaching for the fictitious patient.

In this study case vignettes were constructed in such a way as to illustrate socially acceptable and socially unacceptable diseases. The classification of
acceptability came from the researcher rather than the respondents and invited stereotypical responses.
She found that nurse perceptions were significantly influenced by the social acceptability of the disease.
She concludes that:-

patients with the less socially accepted illnesses were perceived as more sensitive (but)....were characterised negatively in regard to learning about the illness (p419).

The nurses who were studied attributed positive traits to all patients, but they stereotyped specific patients as dependent, anxious and pessimistic. This research begins to address the possibility of professionally acceptable patients who are cared for by social diagnosis and therefore invite particular interventions by the nurse.

The psychological and nursing studies which have identified particular perceptual attributes which lead to stereotypical reactions are worthy of further consideration. Key factors include: the age of the patient, the diagnosis, and what is meant by a preferred patient or a professionally acceptable diagnosis. Early psychology research, using the concept of perception rather than attitude, has shown that the social perception of another individual is strongly influenced
not only by particular characteristics of the individual but also by the nature of the interaction taking place, the context where the interaction occurs and the values of the perceiver (Tagiuri 1968).

Thus personal characteristics, the nature of the interaction, and the context of that interaction as well as the perceiver's values will be taken into consideration and investigated in the present study. This study, however, will not use the concept of stereotype to investigate these criteria further. The use of the concept of stereotypes encourages the researcher to be cut off or removed from the field of study. The investigation of stereotypes can take place anywhere, as the term stereotype implies a fixed nature in the mind of the individual being studied. Whereas the concept of perception, on the other hand, not only allows the researcher to investigate within the particular field of study, but also, encourages the researcher to investigate the imaginative and predictive nature of the mind.

This current thesis is concerned with nurses' (from a variety of working contexts) perceptions of particular patients. Within cardiothoracic clinical settings the patient population tends to be made up of those patients having cardiac surgery as well as those patients being
treated for carcinoma of the lung, oesophagus or bronchus. Generally, the hospital-career of these patients involves spending some time in the care of nurses who work in the operating department, or the intensive care unit, or in the surgical ward.

The present thesis hypothesises that individual and professional nursing perceptions are influenced by a variety of considerations in cardiothoracic settings. Significant variables include the working environment of the nurse, the previous career of the nurse, the surgery performed on the patient, and the professional educational qualifications of the nurse. In order to examine these matters it now becomes necessary to discuss some of the specific research literature which is pertinent to the investigation of nurse patient interaction within the field of cardiothoracic surgery.

2.8. **Psychological Aspects of Cardiothoracic Nursing**

Solodky et al (1986) investigated nurses' perceptions of oncology and cardiac patients. In this study all nurses were given the same case vignette; these fabricated social histories were identical in all respects bar one. Half the nurses were told that the patient was diagnosed as having cancer, whereas, the other group were told the patient's diagnosis was coronary heart disease. Three groups of nurses were involved and the results showed
considerable agreement in attitude towards the prognosis of the patient. Namely that the oncology patient was seen as having a much poorer prognosis than the cardiac patient.

The authors state that the stereotypical attitude of the cancer patient still exists, regardless of education, in the minds of the health professionals including nurses. Implicit in this research is the idea that such attitudes will affect the quality and nature of the nursing care given. This was neither tested in the actual clinical context nor in the experimental situation.

The results of the work indicate that the patient with cancer was perceived by the nurses as being more seriously ill, less likely to be cured, having a shorter life expectancy, being less in control of his illness, being less likely to receive effective treatment, demonstrating a lower activity level, and having a less happy future life.

It is implied that nurses holding such perceptions of patients would affect the nursing process. This arises from the fear of the diagnosis which would inhibit nurse/patient interaction. This study has major limitations, however, since no real patients were involved. The perceptions were obtained from fictitious
patients. In actual nursing with real patients the results may have been very different. For information which is recorded about patients such as diagnosis, age, and social history are only important some of the time since nursing is a dynamic interaction which is frequently pragmatic and self-determining.

The advances made in the Solodky et al (1986) research are important for the current research. The patient population under investigation was the same as that proposed here. Also the significance attributed to prognosis has been investigated. Rather than using case-vignettes, real patients in actual clinical settings have been selected. By doing so the investigation has attempted to ensure that active social and professional perceptions are being studied rather than stereotypes or attitudes. For, it is argued, that a concept such as professional perception allows the advancement and development of interpersonal skills whereas the concept of attitude is both arid in terms of the developments which normally occur in interpersonal relationships and also fixed in terms of psychodynamics.

Negative attitudes towards cancer patients have been well documented in the literature. Hinton (1980) has shown, in his research which deals with death and the act of dying, that people see 'cancer' as not only an ominous
word but one which also has threatening overtones. McCoy & Lansner (1981) in their study on group therapy for cancer patients have shown that individuals equate the diagnosis of cancer with a diagnosis of death. The patients' perceptions of their own diagnosis is an interesting one. For certainly a diagnosis of cancer does mean a precipitous and early death for many, but it is suggested that it is the perception of a growth which is problematic for many rather than the diagnosis per se. This particular problem does require further research but is not the locus of concern for the present study.

Studies carried out on medical students' attitudes and behaviour towards cancer patients have shown that the students develop more pessimistic attitudes towards cancer as their careers develop and feel negative about interacting with cancer patients. (Becker et al 1961, Haley et al 1977, Cooper et al 1980). No comparable longitudinal study of nurses perceptions of particular patients has been conducted. However Davis' (1983a) study of nurses' perceptions of nursing and of significant others did show how perceptions change over time. It may be that the more experienced nurse perceives patients with cancer very differently from the less experienced nurse. The career state of individual nurses and the length of time in post will be investigated in the current setting.
Qualitative patient case accounts carried out within hospital settings (Gooch 1984) indicate the stages of acceptance and denial about diagnoses but the causative relationship between the factors identified is not made. Clearly the diagnostic image of patients is relevant to the way in which nurses perceive them and assume responsibility for both the management and conduct of care.

In the case of nurses' perceptions of patients Viney (1983) argues that it is the images of illnesses built up by individuals which affect the way in which they react when illness becomes an important part of their own life. She extends this argument to both the nurse and the patient. Indeed towards the end of the concluding chapter of her book she suggests that other people's images may have an effect on the ill person by stating:-

the illness-related images of health care professionals vary as much as those of the people they treat. There is, unfortunately, evidence that these images have negative effects (Viney, 1983 pp122-123).

To corroborate this statement Viney refers to the work of Taylor (1979) and Blumberg, Flaherty and Lewis (1980). Each of these studies critically examines the reactions and behaviour of patients and health care professionals towards particular diseases.
They conclude that the health professionals responses and reactions have a direct effect on the coping ability and behaviour of the patient. Viney concludes this section of her book by stating that:

Health care professionals ... are therefore as vulnerable to illness-related images of uncertainty, anxiety, anger, helplessness, depression and isolation. Just as the ill and injured people they work with need to become aware of their own images and their role in creating and maintaining them, so do physicians, other therapists and nurses. Only then can they learn to empathise accurately and communicate effectively with ill people, their families and friends (Viney, 1983 p123).

The analysis developed by Viney is important for the present study in that she identifies the need for self-awareness amongst nurses and states that it is essential that the perceptions of illness are understood. For it is around these perceptions and others that nursing care is organised.
2.9. **Nursing Attributes and Role Expectations**

The literature which addresses the influence of particular attributes of individual nurses is worth considering briefly. For there are qualities or attributes of the nurses which influence social and/or professional perception.

Pioneer research carried out by Meyer (1958) indicated that nurses could be classified into four groups, each with their own concerns and attitudes towards the nursing process. The groups identified were:- those who are primarily concerned with individual patients and plan their work around the care of particular patients only; those concerned with not only with individual patient care but are also keen on teaching others and managing the situation; those primarily concerned with peers or colleagues and finally, those concerned with technical skills and knowledge of essential equipment used in patient care. It would appear then, that nurses develop different approaches towards patient care.

This early research is important in that it identifies nurses who have preferences for particular working situations resulting in particular approaches to patient care. Inevitably then, the social and professional perceptions of nurses in particular clinical settings
will differ. Consequently the perceptions they construct in order to carry out nursing care will also differ. Researchers, therefore, intending to investigate the nursing process must take such differences into consideration when designing their work.

In the present study, there is therefore an intention to compare and contrast the perceptions and construings of nurses from three distinct clinical settings who will all care for the same patient during his or her period of hospitalisation. Such a research design should enable the importance of the nurses' clinical context to be identified. In carrying out such research into social and professional perceptions it is also necessary to take cogniscence of the learned role expectations of both the nurse and the patient as each of these may influence the development of an interpersonal relationship.

Research carried out in the early 1950's, 1960's and 1970's on nurses' perceptions of patients' behaviours indicated that those patients who were least disruptive of hospital routine were viewed most favourably (Highley and Norris 1957, Schwartz 1958 & 1970, Meyer 1959, Viguers 1959, Roth 1963a & 1963b, Ritvo 1963, Meyer and Hoffman 1964, and Stockwell 1972). The techniques used (Viguers 1959, Stockwell 1972) involved the researcher observing nurse-patient interaction and asking the nurse
to rank patients according to descriptive terms derived by the researcher. These particular approaches yielded data from which the concept of the good patient began to be developed. These studies were primarily descriptive and they did not aim for theoretical development either in terms of the psychodynamics of nursing nor in terms of developing a model of nursing which takes role expectations into the framework.

Other research has attempted to investigate the perceived roles of patients and nurses. Copp (1971) investigated both the nurse's and the patient's perceived roles. To do so she utilised cartoon techniques and a modified semantic differential approach. The nurse chose particular words to describe the role of individual patients and then 'attributed affects' to the patients. For example nurses in Copp's study described patients as "frightened dependents, worried questioners, and bewildered endurers" (Copp 1971 p112).

She analysed perception in the hospital and states that for both the patient and the nurse considerable learning has taken place on the perception of illness and the role of the sick person or care-giver. She draws attention to the fact that in the hospital setting the perception of threat must be taken into consideration when analysing role expectations. This particular theme was addressed
in an earlier experimental study by Wolff (1953) who concluded that the physiological and psychological stress which accrues from a threatening situation is based in large part on the way in which the individual perceives the threat.

Clearly in the acute clinical setting where the patient is about to undergo major surgery, fear and stress are important and influential factors. As the context of stress becomes more real for the patient the feeling state becomes increasingly reinforced by the personal perceptions, construction of events, and the behaviour of others. When the patient is devoid of familiarity and the normal range of identity support props such as name, family, clothing, possessions then he or she must adapt his or her behaviour based on a constant intake of perceptions in order to construct reality. In this situation the individual will begin to play the patient role (Kasch and Knutson 1985). Furthermore the overt signs of anxiety and stress may be noticed by the nurse and alleviated by specific interventions. By contrast the role of the nurse may actually embarrass the situation further.

Adler (1928) identified the concept of "social feeling" to assist in the analysis of perception and the importance of perception for interpersonal relationships.
"Social feeling" he characterises as the balance between inferiority and power and the wish for unity. He suggests that individuals always judge other human beings in terms of social feeling. Personal control in the Adlerian sense may be important for several cardiothoracic patients but as Thompson (1981) has identified there are other forms of psychological control which are important in interpersonal relationships where parity of power is not apparent. In nursing the importance of good interpersonal skills and communicative competence at the pre-operative stage has been highlighted in research carried out by Hayward 1975, Boore 1978, Leonard & Kalideen 1985. The relevance of Thompson's (1981) analysis of control has not been extended into rationale of information-giving in the nursing process. Hence it is contended that this aspect of psychological care has become formalised and rigid in practice.

The importance of communication and information-giving is that when competently carried out the patient is empowered to cope with hospitalisation and to understand events occurring around him. In the present study the communicative competence of the nurse will be taken into consideration when patients' understandings about care are compared with nurses' constrictings of patients.
Copp (1971) like Illich (1977) amongst others, understands the sick person as adopting the patient role by force of circumstance. Copp concludes that:

In general patients and nurses hold perceptions of each other's role of which they are not entirely aware yet are able to disclose when given an opportunity.... (p112).

Both Stockwell (1972) and Copp (1971) suggest that nurses have an idealised concept of the patient which may affect nursing care in practice. Suggesting that the perceived roles of both the nurse and the patient have been seen as influential in determining nursing care.

Another aspect of the nurses' communication skills pertaining to the perceived responsibilities of the nurse as patient educator was examined by Honan et al (1988). They identify certain factors which influence the perceived role. These include the environment in which the nurse/patient interaction takes place, and the priority a nurse places on teaching. This study develops some of the ideas produced by earlier research which suggests that the perceived patient role and the priorities for nursing care are inter-related (Gillis and Blesheuvel 1962).

In those situations where the nurse perceives physical
care to be important emotional support may be lacking (Parker, Alkhateeb and Rosen 1983) or to the contrary view as in research carried out by Essen and Sjoden (1991) where the majority of nurses assigned more importance to patient teaching and emotional support rather than physical care. Such distinctions are important to this research which is concerned with understanding the process of nursing in a variety of working contexts.

For these reasons and others mentioned earlier this present study proposes to investigate the perceptions of nurses working in distinctively different clinical situations but caring for the same patients.

2.10 **Education, Professional Development and the Nursing Process.**

Carnevali (1973) states that "the knowledge a nurse uses in a given situation can be as important as the action taken" (p26). She perhaps more importantly points out that the concepts used by nurses must be valid and reliable as these are the essence of professional competence. There is, however, little guidance as to which concepts or values are most important for the practice of nursing.

Hames and Joseph (1980) state that before a nurse can
begin to help others it is necessary to discover oneself. As many nursing concepts affect the way in which others are perceived, it is necessary to strengthen the self-concept and to develop an analysis of nursing which reflects both self-concepts and those pertinent to others.

In a recent publication Smith (1992) identifies the "Emotional Labour of Nursing" and differentiates the caring attributes of nursing. She demonstrates the connection between the care of the student nurse on the ward and his or her ability to care for the patient. Smith's thesis focuses on the quality of nursing in the clinical area and the learning environment of the ward. She concludes that where the nursing process is used as a work method in conjunction with open demonstrative caring for junior staff by senior staff then the physical and emotional aspects of care are likely to be provided to the patient. By creating a climate of caring and support for staff, the nurse is able to care more holistically for the patient. The adoption of such Gestalt values in all aspects of nursing practice is laudable as it encourages self-actualisation in all relationships.

Furthermore Hames and Joseph (1980) state that it is necessary to perceive the patient's problem from his or
her own perspective rather than that of the helper.

Wright (1989) notes that:

Building up a body of knowledge of both the self and of nursing is therefore seen as a vital step before the nursing and helping of others can be put into practice (Wright 1989 p22).

This current trend in advocating the development of self-awareness and self-actualisation amongst nurses is of importance to the current investigation. For, through the investigation of nurse perceptions a variety of developmental strategies could be identified which will enhance the self-awareness of the individual nurse.

To effect systematic changes in the health of the patient requires consensus amongst practitioners of what is achievable in care. Furthermore there is a need for consensus between the patient and the nurse in terms of understanding the process of care and recovery especially in the acute setting where cure and care go hand in glove.

Benner (1984) in describing the development of the nurse from novice to expert highlights the stages of the decision-making process and nursing competencies gained during the transition to clinical expert. The transition from novice to expert has been described as
involving five stages. The novice is the first stage where the nurse is frequently overwhelmed with the myriad of responsibilities of caring for a critically ill patient in a demanding context. Benner (1984) identifies this stage as lasting for the first year in a post. The next stage is one of advanced beginner in which the nurse is reflective and can put context and meaning into clinical experiences. The third stage of competent practitioner indicates that the nurse can see beyond the task and can construct long-term goals for the patient. The proficient stage indicates that the nurse can perceive situations as a whole rather than as separate parts. Finally the expert stage is the highest level of the continuum where the nurse is able to solve complex problems drawing on a wide background and range of experience.

Benner argues that perceptual awareness is crucial to sound judgements and states that the experienced nurse will often make global assessments that initially by-pass critical analysis of events. Conceptual and practical clarity, according to the Benner thesis not only follows from an accurate assessment of the situation but is also related to the length of time a nurse has been working in a particular situation.

These findings are important for the present thesis as
they raise the question of whether there is value in importing an existing theory of nursing into a particular environment or whether it is more valuable for nurses themselves to build and develop a conceptual framework for care from the component parts of the nursing process and a number of theories of nursing.

To begin with the premise that social interaction is inherent in nursing action requires that the researcher takes cognisance of and investigates the repertoire of skills and strategies which enable the pursuit of nursing objectives. To carry out such research necessarily involves the study of the perceptual construction of events and people as these are interlocked and fundamental to the nursing process. No particular line of action or strategy is likely to be effective and appropriate to the nursing care of all patients in all clinical contexts.

Competent nursing action depends upon a breadth of strategies being available to the nurse. It is necessary that the nurse constructs intervention strategies for action which can be adapted to suit the situation and the needs of the patient. For these reasons the analysis of perceptual construings is essential. As it is around these construings that nursing actions and strategies will be determined.
Kasch (1986) states that:

research must come to grips with understanding the relationship between how nurses perceive the persons and situations they encounter in the process of giving care and how they organise their behaviour in pursuit of nursing goals (p227).

2.11. Concluding Comments

To conclude: this chapter has reviewed the relevant nursing and psychology literature in order to demonstrate how nursing and the nursing process have been analysed in the past. Established theories of nursing have been concerned with the component professional elements of nursing rather than the psychodynamics of the activity. Several studies have been discussed which have identified various aspects of perception as problematic to the nursing process. Many of the psychological attributes and care considerations identified will be examined in subsequent chapters.

From previous research it would appear that nurses experience a wealth of thoughts and feelings about nursing and patient care which do not automatically fit into the professional nursing role as advocated by several models of nursing. It is essential to an understanding of the process of nursing to investigate what is happening within the interpersonal relationships inherent to nursing.

To deliver nursing care the interaction between nurse and
patient must be consciously considered. For nurses also are individuals who require certain interpersonal needs to be met. Therefore in order to plan and organise care it is necessary to understand the psychology of the nurse not just assume ideologically that the only focal figure in the relationship is the patient. The nursing process is not a unified entity but is rather a dynamic and differentiated activity which is influenced by many factors. The investigation of this requires careful planning. In the following chapter the theoretical basis for the method chosen and the research design adopted to investigate nurses' perceptions of patients in the nursing process will be presented.
CHAPTER 3
Methodology and Research Design
3.0 **Introduction**

In the review of the literature (Chapter 2), several studies were cited which utilised various methods to investigate certain aspects of the nurse/patient relationship. Foremost amongst these methods were:- semantic differentials (Osgood 1953); projective cartoon techniques (Copp 1971); case vignettes (Solodky 1986); and attitude surveys (Miller 1979).

When planning the present study each of these methods was considered in terms of their application and relevance to the problem under investigation. Whilst such approaches enable the investigation of certain aspects of nursing, they do not provide a comprehensive means of investigating the process of nursing. Each method lacks a conceptual basis which explains the resultant findings. Furthermore the construction of the research instruments using such approaches can be heavily researcher-biased and pre-determined. Finally each method does not encourage subjects to freely express themselves.

Personal Construct Theory and the Role Construct Repertory Test, on the other hand, do enable the investigator to enter into the subject's frame of reference. The Theory explains the complex processes of social cognition and personal perception - two crucial concepts in the analysis of the nursing process.
Consequently this chapter aims to set out the methodological theory on which the present thesis is based; to identify the strengths and weaknesses of such an approach to the study of the nursing process; and finally to describe the research design and procedure which was adopted.

3.1 **The Nature of Human Relationships**

Social psychology, like nursing, in recent years has become more concerned with understanding the whole person. In doing so, emphasis has moved away from the realms of pure scientific research towards a more interactive social type of investigation. Within social psychology, Personal Construct Theory (Kelly 1955) has become a more popular and relevant mode of analysis over the last ten years. Personal Construct Theory has provided the conceptual basis of psychological research on various professions and the respective client-groups (Bannister & Fransella & 1980, Davis 1983a, Beail 1985, Button 1985, Pollock 1987 and Morrison & Burnard 1988 & 1989). Studies carried out within the field of social cognition have indicated the relevance of Personal Construct Theory and Repertory Grid Technique for the investigation of many interactive situations.

To illustrate this point, the conclusions from three major research projects are presented and discussed
briefly.

Bender (1968) showed that if two people are construed by a third to be similar then the third person stated that he would behave similarly towards the other two. In subsequent studies reported in Adams-Webber and Manusco (1983) evidence was gathered using provided constructs which confirmed Bender's hypothesis. Conformity of behaviour and social interaction is important in the nursing care of the patient. For it is proposed that if nurses do perceive patients in particular ways then the patient may fulfil these perceptions in demonstrable behavioural patterns. Also, nurses may be drawn to conforme with one another as well as with patients. A form of peer group pressure may operate which is heavily reliant on particular environmental conditions. The implications of these particular findings for nursing are of relevance to the present study. For it may be that the traditional hierarchy of nursing may influence an individual nurse's perceptions of events and people.

Crockett and Meisel (1974) were concerned with the investigation of the way in which people were led to change impressions when personal constructs were either validated or invalidated in an experimental situation. The results from their investigation showed that the more tightly connected the subjects' constructs, then the more
likely the change in constructs when invalidated in practice. This particular research finding is of interest. For if there are distinctive patterns of perceptions which are tightly interwoven, then the question arises of what happens in practice when perceptions are invalidated either by colleagues or by patients? Whether the nurse, like the experimental subjects in Crockett and Meisel's research, will actually change constructs when invalidation occurs, or whether the nursing perceptions are so professionally determined that no change will take place at all are interesting questions which will be partly answered.

Finally, Duck (1979) in a study of how friendships are formed, states that the individual sets up a model of a potential friend, has expectations concerning the new friend and then the relationship develops depending on whether these social expectations are validated or invalidated in practice. According to Bannister and Fransella (1980) the friend equally validates the constructs we have of ourselves. It is suggested here that the development of a therapeutic nurse-patient relationship may depend on the other party validating perceptual constructs. These research findings will also be taken into consideration in this thesis. For the validation of constructs by each party in the relationship is an essential part of the caring
relationship for both the nurse and the patient. Just as it is necessary for the nurse to affirm and meet the expectations of the patient; so too the patient must reciprocate with the nurse.

3.2 **Personal Construct Theory**

In academic psychology Personal Construct Theory is unusual in four main ways. Firstly, it was presented as a formally stated and complete theory by one person (Kelly 1955). Unlike other psychological theories which have grown and expanded as empirical evidence was gathered (Bannister & Fransella 1980).

Secondly, Personal Construct Theory is considered to be reflexive. This means that the researcher operates within the same parameters as the subject. In effect the theory applies as much to the researcher as it does to the research problem (Kelly 1955, 1963, Bruner & Krench 1968, Bannister 1977, and Bannister & Fransella 1977, 1980). This is particularly important when choosing a theoretical framework and methodological basis from which to investigate nursing and will be explored later in this chapter.

Thirdly, construct theory was deliberately stated in abstract terms and therefore can be utilised in many areas of social or cognitive psychology (Bannister & Fransella
Finally Kelly (1955), when writing his Personal Construct Theory stated that this approach would offer new ways of understanding other psychologies. He called his philosophy of psychology "constructive alternativism" and stated that Personal Construct Theory necessarily considered other psychological theories but offered an alternative reconstruction of events and a new direction for interpretation.

Kelly (1955) set out a systematic theory which detailed the psychological, psychometric and psychotherapeutic implications of construing and perception. He stated that to understand the psychodynamics involved it is necessary to consider the whole person not just the problem with which the individual presents for therapy.

If the theoretical starting point is identified as the whole person and the way in which ongoing psychological and social processes are organised and utilised by the individual, then there is no need to consider the early psychological debates on innateness; drives; motivation or stimuli. Such concepts only consider particular aspects of individual behaviour and assume that development is pre-determined and static. Rather, according to Kelly's theory, the individual is dynamic
and always changing (Neimeyer 1986). Such a description encourages the researcher to analyse the actions and interactions of the individual in terms of past constructions and future predictions. This distinction is important for the analysis of the nursing process. For in the nursing process the present is understood in terms of the construction of perceptions; the recognition of priorities for action; and past experiences.

Kelly's (1955) fundamental postulation suggests that psychologically and socially an individual is not static, fixed in beliefs, values and understanding but is rather, dynamic and open to change. In the decision-making process previous perceptions and experiences are taken into account in order to anticipate or predict outcomes. Anticipation or prediction need not imply conscious thought nor need it relate to the far-off future. Rather it may be virtually instant, or in some cases, the individual may have limitless time to consider eventualities.

If the decision-making process is analysed in this multi-dimensional fashion then at any point on the dimension, Kelly argues that the individual proceeds according to particular anticipations. For most, this method of interaction and decision-making is successful most of the time. But, occasionally, the individual
will get anticipations wrong. Faced with a breakdown in the ability to satisfactorily anticipate events the individual may engage in unusual behaviour (Kelly 1955, Maher 1969). People interacting with this individual and coming into contact with such uncharacteristic behaviour find it unnerving, threatening or even comical.

To fully explain how an individual perceives and anticipates events Kelly (1955) has organised and developed his assumptions into a psychological theory which he terms the psychology of personal constructs. This theory was developed from psychotherapeutic encounters but in fact, as many subsequent researchers have stated it is relevant beyond the realms of psychotherapy (Bannister & Fransella 1980, Davis 1983a, Beail 1985, Button 1985, Burnard 1985, Pollock 1987 and Dunnett 1988).

Kelly's theory provides a basis for understanding psychological decision-making. He describes this process in terms of perceptual corollaries. These Neimeyer, (1986) has categorised into those corollaries which focus on the actual process of construing; those concerned with the structure of the construct system; and finally those concerned with the social embeddedness of an individual's anticipatory efforts.
These three distinctions identified by Neimeyer (1986) are worthy of further comment. For the process of construing necessarily involves the relationship between people or between the individual and the event being perceived (Duck 1988). This can be influenced by several factors, notably, the context or environment where the perceiving takes place and also the social values embedded in or surrounding a relationship (From 1971).

The nurse/patient relationship is bound by many sociological and psychological criteria. The nature of authority, the patient role, and the disease process are all influential and peculiar to the hospital environment and the resultant relationship. Other criteria also influence perception; such as sex differences, age, familial resemblances and physical attractiveness are most obvious determinants in friendship formation but these must not be overlooked when understanding the development of a professional relationship.

A set of eleven corollaries have been expanded and elaborated to form the basis of Personal Construct Theory (Kelly 1955). Each corollary is not mutually exclusive but rather has bearing on the previous and later statements. To summarise these: Personal Construct Theory assumes that the individual strives to anticipate events. This is carried out by detecting recurrent themes or replications within experiences. The interpretations
placed on events are constructs and are considered by Kelly to be dichotomous. Under certain conditions constructs will be more applicable to some events or people than others. In other situations the other pole of the dichotomy, the contrast will be more evident and relevant. In any particular situation the individual has a choice as to which pole of the construct is more appropriate.

An individual's constructs are inter-related in the form of a system. This system is hierarchical in nature with constructs being ordered in relationship to one another. Some aspects of the system may be inconsistent with others. However, the individual's personal construct system is capable of changing as new events are interpreted and understood. The degree of change which takes place is limited by the extent to which the individual openly utilises constructs during any new experience. People may interpret similar events in different ways. However the outlook or overall perspective may be similar. For competent social interaction to take place there has to be an awareness or understanding of the other's personal construct system.
3.3 The Parameters of Personal Construct Theory

For Kelly, Personal Construct Theory is necessarily individualised yet at the same time it is capable of being appreciative of someone else's interpretation of events (Kelly 1955). Constructs are the way in which the individual distinguishes similarity from difference. They are not merely pragmatic, idiosyncratic and chaotic assemblages but, are organised into a complex and interactive system. It is the organisation of and interaction between constructs that enhances the individual's understanding and perception of people or events (Kelly 1955, Beail 1985). Kelly analyses constructs as bipolar in order to emphasise the point that in perceiving people or events the individual both affirms and negates simultaneously. It is this approach to the social psychology of perception that makes Personal Construct Theory applicable to the analysis of nurses' perceptions of patients within the nursing process.

In many nurse/patient interactions, decisions are made based on the negation of particular outcomes. This is most noticeable where the nurse is concerned with particular interventions to prevent compromising the patient's health status. The recent focus on standard setting in clinical practice has taken into consideration
the importance of nursing intervention and possible negative outcomes if the intervention is not carried through competently (Kitson 1990).

Affirmation is more clear cut and is the basis around which many nursing interventions are assessed. Positive outcomes are on the whole a preferred measure of correct nursing anticipation. The coincidental nature of construing in terms of affirmation and negation is most important to the nursing process. Frequently in everyday clinical practice the nurse anticipates the needs of the patient in terms of definite, positive outcomes, based on experience and knowledge and the prevention of particular negative outcomes.

Construing entails the recognition of recurring themes or a regular pattern of events. Thus, according to Kelly (1955), behaviour can be predicted, for through individual actions expectations come which enable the individual to validate or invalidate anticipations and revise perceptual construings through the experience gained. This is postulated in the assessing, planning, implementing and the evaluating of nursing care where ideally the nurse and patient will constantly re-evaluate the interactive process and respond accordingly.

The psychology of personal constructs suggests that all
people try to understand their own experiences in order to anticipate what will happen in the future and improve upon past experiences. The individual is able to anticipate by using an individually developed system of personal constructs. These constructs may be expressed verbally or psychologically to the researcher who is trying to gain an insight into the perceptions of others.

The psychology of personal constructs is not about illness, disease or disorder, nor does it concern itself with the separate psychological concepts of cognition or emotion. Rather it is about how people function psychologically as individuals. It is comprehensive and appears simple in form but theoretically it is very complex.

From this definition can be seen the underlying philosophy which enables change and leads on to a theory which states that each person operates psychologically by using similar methods. This is particularly significant when trying to analyse the perceptions of a particular occupational group, as similarities of perceptions would be expected (Nash 1973, Stewart & Stewart 1981, Pope & Keen 1981, and Button 1985). The dynamism of Personal Construct Theory offers more possibilities to the investigator who is concerned with academic research which has political and professional
implications. The data-base which may be obtained using this conceptual framework has the potential for identifying individual and group development needs. The value of this to the nurse researcher must not be overlooked. The quest for academic and theoretical development are only two of the goals of nursing research. The other goals are more policy directed and may be of relevance to the practicalities of an emerging profession.

In Kelly's (1955) view constructs take their psychological meaning from the way in which they are used. This illustrates not only the events categorised as similar but also identifies those excluded events. In interpersonal psychology that which is implicitly denied is often as much a part of an individual's meaning in uttering a statement as that which is explicitly affirmed (Duck 1973).

There is more to a construct than a personal dichotomy, for according to Kelly (1955) constructs are essentially predictive. An individual construes by anticipating the way in which past events will repeat themselves and therefore by construction seek to make his or her world predictable and manageable. Events, however, seldom repeat themselves exactly. Therefore the individual must select those constructs which are most appropriate
and salient to the understanding and preparation of the future (Duck 1973).

3.4 The Relevance of Personal Construct Theory to the Investigation of the Nursing Process.

In this present study the predictability of perceptual constructs used by nurses caring for patients who have undergone cardiac or thoracic surgery was investigated. The research design was planned in such a way as to elicit common constructs which could then be tested in terms of their applicability in particular clinical environments.

Single constructs are the personal components of the psychological process. The interactions between constructs are important, for not only are they personal but they also provide the foundations of the individual's construct system. Kelly (1955) sees each person as erecting a system of constructs with which to represent and understand experiences. Personal construct theory is predominantly concerned with the system which emerges. To test Kelly's theory psychologists have focused on those constructs which are personal, dichotomous, highly verbalised and dependent on language. Kelly emphasises, however, that many unverbalised distinctions play a part in our activities. He states that the individual often acts on the basis of spontaneous aversions and
infatuations for which there is no verbal description. For Kelly these too are constructs.

It is contended that the discrepancy between verbalised accounts of nursing practice, as reported by professional nurses, and the experience of care, as reported by patients, may be related to the more psychological, emotional or behavioural patterns which contradict or confuse the verbal constructs. In order to assess this possible connection the present study not only investigated nurses' perceptions of patients but also the author has investigated the experiences of nursing for a selected sample of patients.

When Kelly refers to constructs he does not mean verbal formulations only. Early understanding of Kelly's work criticised this aspect and stated that construct theory could not deal with emotions (Adams-Webber 1969). However, within his original writings, Kelly was always clear about the possible ranges of construing, by stating that emotional, physiological and psychological perceptions and feelings could be construed. In the present study attention has focussed on the personal verbalised accounts of nurses' perceptions of particular patients. The interviews with patients, however, were conducted in such a way as to elicit behavioural as well as verbal responses.
Since most psychological investigations rely on the personal verbalised account it has been asserted, that by so doing, Personal Construct Theory investigators are committed to measuring degrees of solipsism and isolation only. Far from committing investigation to such a restrictive interest, Kelly's theory offers a means of understanding communication with others in general. In terms of investigating the nursing process construct theory offers the best means of analysing nursing actions in terms of perceived patient care and interpretation of particular events in distinct clinical settings.

One claim about personal construct theory is that a construct system can subsume new phenomena and restructure itself (Duck 1973). In his study of how friendships are formed, Duck demonstrates the flexibility of a construct-system. He argues that greater psychological construing occurs with those individuals who demonstrate more social ability. As he states "Clearly then there are differences in the abilities of the individual to grasp what the other person is up to." (Duck 1973 p146). Duck's findings are most relevant when trying to understand professional roles and social relationships within the nursing process, not only as they currently exist in particular clinical settings, but also as indicators of possible areas for future policy
and practice development. This is especially significant if the humanist and scientific traditions in nursing are to be reconciled to some extent.

Social science, as a whole, has in recent years turned its concerted attention to interpersonal relationships. Many commonsense assumptions have been tested in empirical research by social psychologists. Early studies focussed on why individuals were attracted to strangers (Byrne 1971, Duck 1977) but more recent research now explores real life long-term or professional relationships (Duck & Sants 1983) and addresses the problem of how relationships develop and change (Perlman & Duck 1987).

To date much of this range of research follows the traditional social psychological approach in that surveys have been carried out or data were gathered using an experimental and control group design. The attempt to investigate interpersonal relationships in the field has rarely been carried out. However, key social psychologists value this approach and advocate a greater methodological sophistication and encourage cross-disciplinary research in particular areas.

To identify the differences which may exist between nurses' abilities to perceive and construe events whilst
involved in the nursing process is the interest and concern of the present study. Nurses in the acute hospital setting often face new and potentially confusing situations as do the patients they care for. It is essential that both groups make sense of what is happening around them in order to maintain control over a particular situation. When the individual's predictions are repeatedly found to be inadequate in a particular situation then confusion, distress and anxiety occur. This in turn leads to hostile or defensive social interaction towards those who appear responsible. Learning new ways of perceiving or construing situations becomes essential for nurses faced with ever-changing clinical situations and interpersonal demands.

Kelly (Maher 1969) argues that in humanistic research the experimenter enlists the help of the subject and makes the most of that relationship. Too often it turns out that the experiment the investigator thinks is being performed is not the same one as the subject. It is of importance to ask what the subject thinks is being done and what he considers evidence of what is happening. In research design terms this means that the researcher must be creative and be prepared to change method or adapt method depending on the subject's perception of the design at each key stage.
By doing so the researcher does not forgo precision in the research method. The object of precision is to provide greater sensitivity to psychological processes which are not easily perceived or recognised. Precision is not determined statistically but rather it is determined by the researcher's understanding of the other.

The role of the researcher can be defined and affected during the stages of research which precede the statement of the formal design. Most published research starts with an assumed hypothesis and tells us what happens from there on. Very often the most exciting stages of research occur before this. Kelly (Maher 1969) argues that there is much to be said for a research strategy of design that insists on the researcher having a first hand clinical understanding of what he or she proposes to investigate.

From this nurse researcher's point of view these aspects of humanistic method are important. For, as Kelly argues (1955) it is necessary that the investigator does not cling to a stance of detached observation when trying to understand the perceptions of the other. Due to the potential involvement of the nurse-researcher in the nursing process it is necessary that any method which is used in an actual clinical setting explores how a
particular nurse (or sample of nurses), perceive(s) and construe(s) patients and events rather than how the researcher construes observed activities.

Greenwood (1984) argues that nurse-researchers studying nursing behaviour should themselves be clinical nurses who share the concepts and understanding relevant to a specific situation. By doing so they will understand more fully the meaning of the behaviour.

Greenwood's approach to nursing research is essentially humanistic and phenomenological. He argues that nursing is concerned with people; actions; interactions; and is essentially a "social phenomenon" (p78). The present investigation accepts this analysis of nursing research Greenwood (1984). For these reasons the research was designed to take place in clinical environments, familiar to the investigator and which constituted the areas of clinical expertise for the researcher.

Within the study of nursing, Personal Construct Theory and the traditions of humanistic methodology are best suited to the investigation of nursing in clinical areas. It allows the nature of the nurse/patient relationship built up in the clinical area to be examined; the nursing actions and communication strategies which follow from the nurse's personal theoretical orientation can be
understood; and the particular techniques that the nurse favours to organise and develop nursing care for particular patients can be appreciated.

Finally, the method requires that the researcher obtains nurses' perceptions of patients who are being cared for in order that the full significance of the theory and its application to an analysis of the nursing process can be demonstrated.

3.5 The Role Construct Repertory Test
The Role Construct Repertory Test was devised by Kelly (1955) as a means of measuring perceptual constructs. The first stage involves the elicitation of perceptual elements, i.e. the people or events around which construing will take place. These elements can be obtained by asking a series of specially formulated questions to which the subject states or writes the name of an individual (Kelly 1955). Alternatively, elements may be supplied by the investigator. This approach is particularly useful when investigating perceptions within a particular environment (Nash 1973, Lockhart & Elliot 1980 and Button 1985). In the present study it was decided to supply elements in order to investigate nurse perceptions of patients from the ward population at the time of the investigation. The use of supplied elements
has been described by Stewart & Stewart (1981) when seeking employees perceptions of a particular management structures. They have shown that supplied elements are very useful to the investigator who wishes to determine the nature of particular interpersonal relationships.

The second stage of the Test involves asking the subject to identify important similarities between elements. This is achieved by presenting the elements in sets of three (triads) and asking the subject to state an important way in which two of the elements are similar yet different from the third. This enables perceptual constructs and contrasts to be identified. Details of the elements, or as in the present study, details of the patients upon whom construing would take place are recorded on a card in a standard format and presented to the subject. Each card is usually numbered on the reverse for ease of recording. The investigator can therefore keep an account of the constructs generated for particular elements.

The third stage involves subjects scoring each element for each construct obtained. Thereby providing a grid of construct scores. A four point scale is recommended for this stage of the procedure by several authors thereby preventing too much clustering around the mid-point (Bannister & Fransella 1977).
Such an approach to the study of perception enables the personal construct system of an individual to be focal and important. It allows an individual to produce constructs in an examinable form, and also enables the investigator to understand the other's cognitive world.

Kelly's traditional method allows the idiosyncratic nature of constructs and construct-systems to be examined. This is an important distinction if the investigator is to understand how the other perceives events and people. The Role Construct Repertory Test also enables the commonality of perceptions for a particular identifiable group to be discerned. The latter is of significance here as the study aims to describe professional preceptions of nurses.

3.6 Supplied or Elicited Constructs?
Within the literature there is considerable debate about the value of supplied constructs compared with elicited constructs when trying to analyse the perceptions of others. There is research evidence that constructs which are elicited from individual subjects are more personally meaningful to these subjects than constructs supplied from other sources (Adams-Webber 1979). This is an important finding for consideration since this particular research has been designed to elicit constructs at the
first stage and then to treat these as supplied constructs for the Main Study. The advantage of supplying constructs rather than eliciting them is that it permits a higher degree of standardisation in administration and analysis. Also, comparisons in construing and perceiving can be drawn. It does however represent a major departure from Kelly's emphasis on the personal nature of the individual's construction process.

It is argued here that if the supplied constructs are devised along the lines of the semantic differential (Osgood 1953) by the investigator alone, then the meaningfulness of the construct is lost. If constructs, however, are elicited from a particular group of professionals and then represented to other members of the same profession then it is contended that such constructs will have meaning for these individuals also.

Research which directly compares elicited and supplied constructs in repertory grid testing has been widely reviewed by prominent psychologists (Adams-Webber 1969, Bonarius 1970). In general most of the evidence shows that individuals tend to prefer to describe acquaintances in terms of their own personal constructs rather than use constructs elicited from others.
The comparative research carried out has however focused on the subject's judgement of the meaningfulness of elicited or supplied constructs. Bieri (1955 & 1966) states that people may prefer to use a set of personal constructs to explain others or their social environment but most people are accustomed to communicating their own judgements and understanding to others in a common language and therefore supplied constructs are just as meaningful (Bannister and Mair 1968).

By comparison the idiosyncratic and solipsistic nature of truly personal constructs may not be understandable to the other. Kelly in Maher (1969) himself states that regardless of the words used the individual does his or her own construing. The supposed idiosyncratic nature of construing has been shown by Oswalt (1974) to be disputable in a major piece of research. The findings from this research indicated that subjects actually had a limited set of constructs to identify people. His work also coincided with that of several researchers quoted in Adams-Webber (1979 pp20-26), who have stated that the scoring of supplied and elicited constructs was almost identical. Such research has also stated that it was possible to obtain a set of supplied constructs which did not differ significantly from a particular subject's own elicited constructs. In this current research, it is contended that similarities in construing and constructs
generated will be present. This particular statement was tested in the first stage of the research.

Personal Construct Theory and Repertory Grid Testing are versatile in allowing the researcher to develop measures in a manner which can be individually tailored to meet the needs of the study (Lockhart & Elliot 1980, Pope & Keen 1981, and Dunnett 1988). In this respect both the theoretical approach and the testing techniques have undergone several revisions in recent years. Kelly's original approach was designed to assist the psychologist and client during therapy sessions and was very much focused on the individual and the individual's responses.

More recently, Personal Construct Theory and Repertory Grid Testing have been used as a basis for research within many disciplines, including anthropology, psychology, social psychology and nursing (Orley 1976, Davis 1984a, Button 1985, Pollock 1986, Morrison & Burnard 1989). The results of these studies provide insight into the perceptual norms and understandings in various cultural, occupational or socially-deviant groups. By the use of role construct repertory testing the investigator was able to gain an understanding of not only individuals' perceptions but also to gain insight into cultural or group perceptions and the rationale behind such understandings.
The methodological revisions of Kelly's (1955) traditional method which have been made by several researchers concerned with identifying common perceptions of several people in specific situations have been very valuable to the present study. The main interest of the current research is to investigate nurses' perceptions of patients in the context of cardiothoracic surgery. Individual and idiosyncratic personal constructs are of interest but the professional constructs of nursing are worth identifying in order to describe the commonalities in the process of nursing; identify the parameters of nursing care; and provide guidance on the development of nursing practice.

Several authors have identified the benefits of using Role Construct Repertory Grid Testing as a means of investigating the social, therapeutic and professional significance of perception. (Kelly 1955, Bannister and Fransella 1980, & Pollock 1986). These benefits can be summarised as follows:

(i) The elicitation of constructs focuses on the individual and provides a means of defining the subject's perception of people and or events. Thereby researcher bias can be reduced and objectivity maximised. These statements are particularly important in the present
study which involved an initial elicitation of perceptual constructs and then the subsequent repertory testing of these constructs with other and distinct subjects.

(ii) The empathic discipline of the procedure ensures that each interview is conducted similarly with minimal interference by the researcher. It is important, however, that the interviewer gains insight into the relative importance or salience of different kinds of constructs. Stewart and Stewart (1981 p22) state that the construct system of an individual is highly ordered and inter-related. Particular constructs are more meaningful than others and therefore more central to the essence of the individual's interpersonal relationships (Duck 1988).

To fully appreciate the complexity and salience of a person's construct system it is important that the researcher is skilled in interviewing techniques which enable disclosure to take place. Laddering is the term given to the technique of obtaining further information from the subject on personal constructs. To do this the researcher may ask qualifying questions about material attributes, actions taken or feelings experienced regarding the particular people or events being construed. This interview technique is important not only when eliciting individual constructs but also when
validating supplied constructs. Again this is a key point for the present study which involves both of these stages in the research design. The development of a particular construct is important in order to articulate and clarify the meaning. For although an individual subject may repeat a construct, the meaning may be altered for the particular individuals being construed, therefore it is important that the researcher does not just assume that the construct has been repeated but asks appropriate questions to enable the construct to be elaborated and developed.

(iii) The standardisation of the method to produce a grid enables the subject to interpret aims and avoid idiosyncratic choices or irrelevant answers. However the need for pre-interview preparation and post-interview support is essential and in the present study was carefully planned in order to enable the subject to fully appreciate the aims and implications of disclosure.

(iv) Qualitative and quantitative data are obtained which are amenable to precise analysis and are complimentary to one another. Within Repertory Grid Testing there are five principal methods of analysis for quantitative data these are frequency counts, content analysis, visual focusing, cluster analysis, and principal component analysis. The first two statistical techniques enable
the researcher to examine the similarities across multiple grids. Whereas the latter three are principally designed for the examination of the relationship within a particular grid.

The present study utilises a variety of statistical analysis techniques at each stage of the research. Initially frequency counts and content analyses were carried out to demonstrate commonalities in construing. In the Main Study the focus of analysis was on the variance between grids in order to identify the factors which influenced construing.

3.7 **Research Design and Procedure**

The methodology chosen for data collection involved the application of Personal Construct Theory and Role Construct Repertory Testing. In order to answer the research questions which were posed in Chapter 1 several revisions of the recommended method advocated by Kelly (1955) were necessary.

This particular thesis is concerned with the investigation of perceptions of a professional group; particularly nurses' perceptions of patients within the nursing process. For these reasons the investigation initially elicited perceptual constructs from nurses
working with and caring for particular patients. These constructs were then standardised and supplied to other nurses in order to assess the applicability of the constructs and to identify common patterns. Rather than referring to patients from the nurses' own memories as the orthodox psychological practice suggests (Kelly 1955) this research studied nurses' perceptions of a selected sample of patients from the ward situation in which they worked.

As previously suggested, several criteria are important in order to understand an individual's perception of another. It is necessary to take into consideration the nature and roles within the dyadic relationship, the context where the perceiving is taking place and the anticipated outcomes for each party. In nursing the dyadic relationship between nurse and patient is important and therefore the present investigation not only fully examined nurses' perceptions of patients but also patients' understandings of nursing care were studied. Differences of clinical setting, the patients' diagnoses and various personal aspects of both nurses and patients have been identified in the literature as important not only for perception but also for care planning. As the requirements of patients in each clinical context differs, so too does the process of planning care. The research was set up to compare data
obtained in order to discern any differences and similarities in nurses' perceptions of patients and to analyse more fully the processes involved in planning care in various clinical settings, (involving the same patients and different nurses).

Prior to commencing data collection, written permission was obtained from the appropriate Joint Ethical Committee of the Health Board and the University concerned. Permission and consent were also sought from senior nurse-managers, consultant medical staff, participating nurses and patients.

To recapitulate from Chapter 1, the research objective was to conduct a psychological examination of the nursing process in two distinct cardiothoracic settings. Thereby, identifying specific factors which influenced nurses' perceptions of patients and affected their decision-making in the nursing process. In order to gain such an understanding ten hypothetical questions were formulated. These were constructed to enable the identification of particular social and professional attributes which accounted for variation and commonality in nurses' perceptions of patients.
3.8 Setting for Investigation

Although Scotland has the highest incidence of heart disease in Western Europe (Scottish In-Patient Statistics 1988 and 1991) the provision and funding of specialist cardiac centres is fairly recent. At the time of study there were four cardiothoracic centres funded by the Scottish Office Home and Health Department.

For this project the nurses working in two Scottish cardiothoracic centres were requested to participate. The particular centres were specifically chosen to be distinctive in certain aspects. This deliberate choice was made in order to evaluate the effects of specialisation and to identify possible directions for health service policy. Hospital 'A' was selected because of its established cardiothoracic unit. The unit had been running for 10 years and was one of the busiest cardiac units in the Central Belt of Scotland.

Hospital 'B' had a newly funded and developing cardiac centre. Cardiac surgery in this hospital had been carried out on a piecemeal basis for many years. At the time of investigation government departments were recognising the need for funding another Scottish centre with a distinct geographic location and catchment area. Previously, patients from the extreme north and north-east of Scotland were sent to one of the centrally
located hospitals for cardiac surgical intervention. This could involve journeys of more than 200 miles for some families. Clearly there was a need for another geographically strategic centre. Thoracic surgery per se had been carried out in Hospital 'B' for many decades.

Nurses who care for cardiothoracic patients work in four specialist areas. The operating theatre, the recovery ward, the intensive care unit, and the surgical ward. The pre-surgical build-up and preparation of these patients in clinics and medical wards was not investigated.

With increasing professionalisation of nurses through education, career patterns, structural reorganisation and government plans it was decided to interview all registered nurses who cared for patients having cardiac or thoracic surgery in each particular hospital. Student Nurses, Nursing Assistants and Enrolled Nurses were not included. The Student Nurses allocated to the specialist surgical ward and operating theatres were only there for a short length of time. In theatre, the role of the student is primarily supernumary and at the time of the study, basic course students spent no time in the Intensive Care Unit.

Enrolled Nurses were not included as the recommendations
of the United Kingdom Central Council Project 2000 report (1986) advocate one grade of nurse. In some of clinical areas, notably the intensive care unit no Enrolled Nurses were employed. As the project was primarily concerned with the professional nurse's perception of the patient, the Nursing Assistant was not included because of the absence of this particular group of workers from the clinical contexts under investigation.

As indicated earlier, the research design adopted aimed to combine the initial elicitation of constructs with a later application of these constructs by different nurses. To serve this purpose the research was designed in four stages as indicated below.

3.9 Elicitation Stage and Piloting of Research Questionnaires

In the initial stage of the research perceptual constructs were elicited from nurses working in general surgery using supplied elements (Bannister and Fransella 1977, 1980, Stewart & Stewart 1981 and Beail 1985). Following the elicitation of constructs all nurses were asked to rate each patient according to their own perceptual constructs generated. To do this a four-point scale was used thereby encouraging the polar distinctions to be utilised. Finally, each nurse was interviewed using a semi-structured interview schedule
and given a biographical questionnaire to complete in order to: gain insight into how ideally nursing-care would be planned; identify the criteria used by nurses in assessing the needs of different types of patients and finally to determine which biographical factors may effect perception and social cognition. For each nurse a perceptual grid was obtained together with a set of interview and biographical data.

The patients (elements) about whom the construing took place were purposively selected from the ward population at the time of investigation according to certain criteria. Care was taken to ensure that patient age ranges, sex and type of surgery performed, were represented in the sample. In addition the following criteria required to be fulfilled: the patient must have remained in hospital for at least 5 days and have received some care from all nurses participating in the study; the patient must have undergone surgery; the patient must have consented to participate in the project and must be considered well enough (by the nurse-in-charge and the researcher) to participate in a post-operative interview.

In order to interview patients an interview schedule was developed from ideas contained within various quality assurance tools (Goldstone, Ball & Collier 1985, National
However, rather than observe particular nursing practices the patients were interviewed and questioned on their expectations and understanding of the care given. These interviews explored the patient's hospitalisation in terms of relationships with nursing staff and the applicability of the care received and given. Such an approach provided an insight into the patient's understanding and knowledge of what was happening during the nursing process.

3.10 **The Validation Stage**

This stage of the research was set up to test the applicability of the standardised and supplied constructs generated during the elicitation stage. Nurses working in cardiothoracic settings were invited to participate. The same procedures in terms of patient selection, completion of biographical questionnaires and patient interviews were carried out.

3.11 **Main Study Hospital A: An Established Cardiothoracic Unit.**

In this part of the Main Study, in Hospital A, all of the above procedures were followed except for the initial elicitation of perceptual constructs. The results from the elicitation and validation stages indicated that there was a finite list of perceptual constructs which all nurses working in surgery were using to construe
patients' needs and nursing care. Here therefore the standardised and supplied constructs were used. The biographical questionnaire and patient interview schedule were administered as before. The aim of this stage was to identify the attributes or factors which influenced nurses' perceptions of patients and to evaluate patients' accounts of care alongside the nurses' perceptions.

3.12 **Main Study Hospital B: A New Cardiothoracic Unit.**

An identical procedure to that carried out in Hospital A was followed. Once again the aim of this stage of the investigation was to identify any attributes or factors which influenced nurses' perception of patients within the same speciality but in a different hospital setting.

This complex research design which utilised both qualitative and quantitative approaches had distinct benefits in terms of the triangulation of data and subsequent data analyses. The elicitation stage enabled constructs to be generated from several nurses' perceptions of a variety of surgical patients. The validation stage tested the applicability of these constructs in cardiothoracic nursing and enabled the constructs to be standardised. The third and fourth stages, the Main Study, enabled the identification of key common factors which influenced nurses' perceptions. In addition a comparative analysis was carried out and
general conclusions reached. By interviewing patients at each stage of the investigation it was possible to identify common concerns and understandings of care in different hospital settings.
CHAPTER 4

The Elicitation and Validation of Perceptual Constructs.
4.0 **Introduction**

In this chapter the elicitation and validation of constructs will be described. As these two procedures are crucial to the development of the main thesis attention will be given to each stage of the investigation. The chapter is organised into sections successively. Each stage of analysis will be presented, described briefly, and discussed under the following headings:

- The setting and access.
- Sampling procedure
- Administrative procedure.
- Biographical details of nurses.
- Nurses' perceptions and construings.
- Patient interviews.

To recapitulate from Chapter Three, the elicitation stage of the study is primarily concerned with the identification of nursing constructs which will be later standardised and utilised in the Main Study. The validation stage is primarily concerned with standardisation and testing of a pool of perceptual constructs in order to ascertain the meaningfulness and application of the constructs by a sample of nurses.
4.1 THE ELICITATION STAGE

a. The Setting and Access

The hospital where the elicitation stage of the research took place was the equivalent of a District General Hospital that provided a wide range of surgical services. The Hospital had two general surgical wards. Each ward contained 26 beds, and was designed on the Nightingale style with all beds in one large area rather than a series of single or four-bedded rooms.

Elective surgery constituted the major workload of the wards and according to hospital-based records and resource management statistics, bed occupancy (that is the percentage of the beds on the ward which were filled at any one time) was usually 90% for a one month period. Several members of the nursing, medical and para-medical staff of the hospital were involved in teaching nursing and medical students. Additional specialist services, such as advanced diagnostic techniques or neurosurgical facilities, were available at a nearby teaching hospital.

Emergency surgical intervention was also catered for and two beds were allocated for this purpose in each ward. The operating department provided facilities for general surgery and orthopaedic surgery. All grades of established nursing staff in the hospital were allocated
to a particular area of work and generally remained in that area until they chose to apply for another job. Student nurses were allocated to the hospital for surgical, and geriatric nursing experience.

Nurses involved in caring for surgical patients in this general hospital were asked to participate in the pilot study. The focus of general rather than cardiothoracic surgery was chosen both for the following theoretical and methodological reasons: in order to identify core constructs for all types of surgical nursing; to avoid contamination of the sample of nurses who would be participating in the Main Study (the number of nurses working in cardiothoracic was much less than those working in general surgery).

Prior to commencing the investigation approval was granted from the local Ethical Committee, senior nurse managers and consultant surgeons. Anonymity of records and confidentiality were discussed with those patients and nurses who participated in the pilot study. Considerable time was spent discussing confidentiality of data with nurses.

In order to elicit perceptions and construings from nurses specific details about real patients currently being cared for on the surgical wards were presented and
discussed. Since these patients were still ill and receiving care in the hospital it was vitally important that confidence was gained and anonymity ensured. Furthermore the nurses who participated were asked to disclose personal perceptions as well as professional ones about specific patients for whom they were actually caring. It was therefore essential, to the researcher, to develop trust with each nurse.

Fear of retribution or any untoward repercussions were discussed with both nurses and patients. The concerns and apprehensions about disclosing such information were considered and both groups were assured that only the researcher would have access to the data gathered. Further assurance was given that no information disclosed would be shared with other individuals in the hospital unless the particular nurse or patient being interviewed wished specific information to be disclosed to a third party. It was explained, however, that the data gathered would be written up and presented anonymously. This guarantee was acceptable to all the nurses and patients concerned, and of course has been adhered to.

b. **Sampling Procedure - Nursing Staff**
A sample of 10 first-level, Registered General Nurses, (9 female and 1 male) who were involved in caring for surgical patients was chosen. This sample consisted of
all the registered nurses who worked in the operating department and the two related surgical wards at the time of the investigation. The establishment figures for both day and night duty (first level nurses) in both wards and the operating department is 10.8 whole-time equivalents. This is the number of first-level nurses who notionally would have been employed full-time to provide an adequate service. At the time of the investigation, however, there were actually two part-time vacancies in the surgical wards. This meant that the sample of nurses obtained was the maximum possible. All nurses who participated had recently given care to each of the patients in the sample selected.

The nature of the project was explained to each nurse and the individual's verbal consent was obtained. The right to withdraw from the research was offered during the actual data gathering process. All nurses participated at each stage, and no-one withdrew. A private office, in an empty ward close to the working environment of the nurses, was used to carry out the interviews. This helped to ensure that confidentiality could be honoured and that the interviews could progress without interruption.

All nurse interviews were conducted during the working shift of the particular nurse. The timing of the
interviews was planned to fit in with not only the normal working hours of the nurses concerned but also the demands of the clinical environment. As the interviews took (on average) ninety minutes to complete, extra cover for the surgical ward and the operating theatre was arranged in consultation with the appropriate nurse-manager.

Each nurse who participated had worked in general surgery for at least nine months and was familiar with the planning and delivery of a wide range of nursing care. In each of the wards and the operating department, care was planned and documented following the parameters of the nursing process and based on Roper, Logan and Tierney's (1980) "activities of living".

c. **Sampling Procedure - Patients**

The patients upon whom the nurses' construings were based were selected from the population on the ward at the time of investigation. Each of these patients fulfilled the criteria for selection. From the patient population of 46, at the time of the study, fourteen were selected using the following criteria:-

1) All patients would undergo, or had recently undergone surgery.

2) All patients would be or had been cared for by all nurses in the sample.
3) The average length of stay for each patient would be five days.

4) All patients would be interested in participating. Consent to participate in the project and the right to withdraw would be offered at each stage.

5) The patient sample would reflect the age-ranges and sexes represented on the ward.

Table 1 shows the age, sex, admission status and proposed surgery of each patient in the sample.
<table>
<thead>
<tr>
<th>Patient Code No.</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Admission Status</th>
<th>Surgery Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>91</td>
<td>F</td>
<td>Elective</td>
<td>Right Hemicolectomy</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>F</td>
<td>Emergency</td>
<td>Colectomy</td>
</tr>
<tr>
<td>3</td>
<td>57</td>
<td>F</td>
<td>Elective</td>
<td>Closure of Colostomy</td>
</tr>
<tr>
<td>4</td>
<td>49</td>
<td>F</td>
<td>Elective</td>
<td>Sub-total Colectomy</td>
</tr>
<tr>
<td>5</td>
<td>66</td>
<td>F</td>
<td>Elective</td>
<td>Hartman's Procedure</td>
</tr>
<tr>
<td>6</td>
<td>58</td>
<td>F</td>
<td>Elective</td>
<td>Cholecystectomy</td>
</tr>
<tr>
<td>7</td>
<td>64</td>
<td>F</td>
<td>Elective</td>
<td>Laparotomy</td>
</tr>
<tr>
<td>8</td>
<td>63</td>
<td>M</td>
<td>Elective</td>
<td>Thoracolaparotomy</td>
</tr>
<tr>
<td>9</td>
<td>78</td>
<td>M</td>
<td>Elective</td>
<td>Neck node biopsy</td>
</tr>
<tr>
<td>10</td>
<td>50</td>
<td>M</td>
<td>Elective</td>
<td>Cholecystectomy</td>
</tr>
<tr>
<td>11</td>
<td>39</td>
<td>M</td>
<td>Elective</td>
<td>Vagotomy</td>
</tr>
<tr>
<td>12</td>
<td>65</td>
<td>M</td>
<td>Elective</td>
<td>Repair of Abdominal Fistula</td>
</tr>
<tr>
<td>13</td>
<td>74</td>
<td>M</td>
<td>Elective</td>
<td>Trans-urethral resection of prostate gland</td>
</tr>
<tr>
<td>14</td>
<td>68</td>
<td>M</td>
<td>Emergency</td>
<td>Cystoscopy</td>
</tr>
</tbody>
</table>

Legend: F: Female  
M: Male
In order to pilot the patient interview schedule (Appendix 1) four patients from the sample of fourteen were selected at random and were approached and asked if they would participate in a further stage of the research which would involve an in-depth interview following surgery. These interviews were carried out on the 3rd, 4th or 5th post-operative days. The variation in timing of the interview was due to the well-being of the patient.

d. **Administrative Procedure – Nursing Staff**

During the elicitation study all nurses were interviewed using a modified version of The Role Construct Repertory Test. The modification being that the elements (patients) upon which the nurses were asked to construe were selected by the researcher. Details of the fourteen patients chosen were typed onto a Record Card as shown in Example 1 which uses fictitious patient information to illustrate the presentation technique. For data gathering the details given on the card corresponded to the key introductory information given to nurses during the handover report. Each card was numbered on the reverse from 1-14.
Example 1

Jane Smith, age 58 years

Cholecystectomy.

(number on the reverse side of the card was 9)

The faces of the cards which displayed patient details were then presented in sets of three (triads) to the subjects (Appendix 2). Each nurse was asked to state an important way in which two of the three patients were similar yet different from the third. By careful questioning each triad of patients was considered by each nurse and the perceptual constructs fully articulated. (Appendix 3).

Occasionally laddering prompts were used to clarify constructs. (To recapitulate, laddering is the technical term applied to the procedure used by the investigator to enable the subject to fully express the construing). At this stage of the investigation, the prompts used by the investigator assisted the nurses in stating how they perceived the patients in terms of demands, responsibilities, concerns, or personal feelings.

The practical implications of the personal demands of this procedure were unusual in being traumatic for some
nurses and are worth commenting upon. As realisation dawned that individual perceptions were being brought into consciousness and articulated, some nurses began to feel that they were "bad nurses". Consequently at the end of the construing process the researcher took time to support and counsel these nurses in order to enable each of them to return confident and emotionally composed to the workplace.

One nurse, at the end of the construing interview, stated; "This is bad news for nurses. I can't separate patients into ordinary people. Surgery is always the first time for the patient, the risks are the same for them all. It's terrible isn't it?"

This nurse was concerned that she was perceiving patients as illnesses or operations rather than as individual human beings.

As the data were gathered whilst these nurses were on duty and would be caring for the same patients about whom they had just been interviewed it was essential that a respondent support service was built into the research design. The advantages and benefits of this method (namely asking nurses to construe real patients they were caring for as opposed to fictitious or hypothetical patients created by the researcher) greatly outweigh the risks and disadvantages. The process enabled accurate
perceptions to be obtained about real patients whilst being involved in the nursing process. The counselling skill on the part of the researcher when distress emerged should not be underestimated. (The author is trained in psychology, familiar with the therapeutic value of repertory grid technique and has a wide range of counselling expertise). So it was possible for the potentially distressing psychodynamics to be taken into consideration and appropriate support planned. It is strongly recommended that any investigator wishing to utilise this methodology takes into consideration the counselling and support that may be necessary for individual subjects to regain self-esteem and confidence post interview.

Following the elicitation of perceptual constructs, every patient card was re-presented and the nurse was asked to rate each patient on a 1-4 scale according to each construct generated, thereby creating a repertory grid for each nurse (Appendix 4). A score of 1 indicated that the construct pole of the construing statement applied strongly to that particular patient whereas a score of 4 indicated that the contrast pole applied strongly. Scores of 2 or 3 were used if the construct or contrast applied but not strongly. A four-point scale was purposely chosen to enhance polarisation of choice and to prevent clustering around the mid-point.
(Bannister and Fransella 1977 & 1980). In addition to the elicitation and scoring of constructs which lasted approximately ninety minutes each nurse completed a biographical questionnaire (Appendix 5) and answered a series of questions about the practice of care-planning. The entire procedure lasted 2 hours without interruption. If individual support was required then the nurse and researcher spent in total 2-3 hours together.

e. **Administrative Procedure - Patients**

The four patients selected for participation in the interview were randomly chosen from the sample group of patients. Verbal consent was obtained from each patient and access to the patient was negotiated with both the patient and the nursing staff. The sister's office on the ward was made available for these interviews although each patient preferred to remain by his/her own bed.

It was explained that there were no right or wrong answers to the questions to be asked and that all answers would be treated in confidence. The opportunity to withdraw at any stage was offered to each patient. All patients participated in the entire interview. The patient interviews took place after the data from the nursing staff had been collected. The selection of patients to be interviewed was not discussed or disclosed to the nursing staff until the day of the interview.
This precaution was deliberately designed to prevent such knowledge directly influencing the construing process.

f. **Biographical Data - Nurses**

The results of the biographical questionnaire provided information on the age, work experiences, type of nurse education completed, post-basic courses completed, opinions on staffing levels and understanding of care-planning in particular work contexts.

Table 2 presents some of the key information obtained.

<table>
<thead>
<tr>
<th>Workplace</th>
<th>No.</th>
<th>%</th>
<th>Mean age</th>
<th>Median length of time in present post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Theatre</td>
<td>3</td>
<td>30%</td>
<td>31 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>1</td>
<td>10%</td>
<td>23 years</td>
<td>1 year</td>
</tr>
<tr>
<td>Surgical Ward</td>
<td>6</td>
<td>60%</td>
<td>28 years</td>
<td>1.5 years</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>10</td>
<td>100%</td>
<td>27 years</td>
<td>1.5 years</td>
</tr>
</tbody>
</table>

As can be seen from Table 2 four nurses worked in the operating department and six on the surgical wards. The mean age of the nurses was 27 years and the median length of time in the present post was 18 months. The median
was used to obtain a measure on this variable as the time periods varied from 9 months to 20 years. Seven nurses had completed the three year RGN course, two nurses had completed a conversion course from Enrolled nurse to Registered nurse. One nurse was a graduate in social sciences and had then entered nursing completing a shortened Registered General Nurse course. Seven of the nurses had held surgical posts elsewhere. Two theatre nurses had worked only in operating departments for the previous two years, while for one nurse the surgical ward was her first job since completing her nurse education 9 months earlier.

Very few nurses had completed post-basic courses although all had attended study days, conferences or in-service educational sessions which were relevant to their particular working situation. Only two nurses were on two parts of the Register. One was registered as a general as well as a mental health nurse. The other was a midwife and general nurse. Only one person was in the process of completing a post-basic qualification, namely the London University Diploma in Nursing. The lack of post-basic nursing courses available across the particular Health Board concerned was commented upon by six nurses.
g. **Care-Planning**

All nurses were relatively dissatisfied with the process of care-planning in their particular work context. Several stated that the care-plans were nursing focused rather than patient focused. In fact some care-plans were constructed prior to the patient arriving on the ward and relied on medical diagnosis alone to plan subsequent nursing interventions. When asked to describe the most important elements of patient care, the answers given were primarily social. All the nurses stated that a good rapport was essential between nurse and patient; the ward nurses further added that it was important to have a positive outlook regarding patient recovery and reaction to any mutilating surgery which was sometimes performed. The physical cleanliness of the patient was described as important by four nurses. They explained this in terms of reducing post-operative infection and stated that regular bathing, washing and the availability of clean night attire were essential in a surgical ward.

The operating department nurses, on the other hand, stated that patient safety was important whilst in their care. They made specific reference to positioning the patient to avoid anatomical damage and the correct application of the indifferent diathermy electrode to avoid burns as examples of patient safety precautions.
When interviewed about understandings of care-planning each nurse in the sample used the term 'individualised nursing care'. When asked to elaborate and substantiate his or her understanding of the term all nurses initially focused on physical tasks that they carried out for the patient. For example the ward and recovery room nurses described the bowel preparation necessary prior to surgery; the post-operative care of the surgical wound; the monitoring and maintenance of surgical drainage systems; the monitoring and maintaining of intra-venous infusions and fluid intake; the procedure adopted when assisting patients with their personal toilet; the procedure adopted when encouraging mobilisation; the administration of medications and the task of ordering and serving patient's meals.

The theatre nurses, on the other hand, focused initially on the preparation of surgical instrumentation; the layout of the operating theatre; the positioning of the patient for surgery; the control of the patient's temperature; the count of swabs, needles and instruments and the safe transfer of the patient from the ward to the operating theatre and back again.

Following these first explanations the term 'psychological care' was frequently used. When
explained this tended to mean that the nurses had perceived the patient as "anxious"; "frightened for themselves"; or "poor souls who need counselling". None of the nurses had special counselling skills but of the 6 who used the term they each stated that they "regularly counsel patients".

The concept of counselling was further explored and several nurses defined this in the old Scottish way namely of "being tellt". As one nurse explained "you just tell the patient that everything will be OK even if you know it isn't. You have to tell them what to do and that what is happening is quite normal". Concepts such as trust, non-directiveness, empathy, and client-centredness were never mentioned by any of the nurses.

The process of counselling was also interpreted as reassurance and the aim of this was to tell the patient about procedures and to avoid the patient "dwelling on the worst". One nurse referred to the 23 year old female patient who had emergency bowel surgery as: "Just a quine (a young woman). Imagine having that at her age. She'll need to be reassured". When exploring the nature of this reassurance the nurse explained "I'll just tell her everything will be fine", and that the Stoma Nurse would be contacted.
The majority of nurses (8/10) were dissatisfied with staffing levels and commented that due to a shortage of trained staff they did not have enough time to care for patients properly in the surgical wards. In the case of the theatre nurses the perceived low staffing levels were blamed for the nurses' inability to conduct pre-operative visits of surgical patients on a regular basis. Due to the speed of surgery and the throughput of patients a nurse could not be released from the operating theatre or the recovery room to conduct a pre-surgical assessment of the patient on the ward. All trained nurses were required in theatre to prepare equipment for the operating list and to assist with anaesthetics and surgery.

The results obtained from the biographical questionnaire and interview on care-planning indicated that similarities and differences in understandings amongst the nursing staff existed. The lack of post-basic education was striking and a source of complaint for many of the nurses. In fact the theatre nurses and the recovery room nurses had undergone no specialist training to work in these areas.

Work was organised on a team basis within the wards and the operating department. In the teams, however, the
nurses were primarily carrying out tasks for patients, other nurses and doctors rather than working together to plan and deliver care to a group of patients. For example the nurse-in-charge would request that a particular nurse completed the ordering or arranged the coffee-breaks. A team leader was always appointed and this tended to be the nurse-in-charge who then delegated certain aspects of specific patient care and duties to individual nurses.

Observations which correspond with the verbal responses made by the nurses indicated that no special time was devoted to care-planning. All ward and theatre activities were driven by routine and traditional practices. Frequently clinical practices were out-of-date and kept going by ritual rather than by patient choice or scientific evidence. For example all patients who were to undergo surgery had wide expanses of body hair removed despite evidence against the efficacy of elaborate bathing rituals and shaving prior to surgery (NATN 1989).

The gap between the ideas proposed within the nursing process and the actual practice of nursing in these environments appeared immense when care plans were examined and practice observed. In the surgical wards the recording of care was carried out on an ad hoc basis.
at the end of a working shift by the nurse-in-charge. In the operating department no nursing care was documented at all. The only record completed by nurses indicating that the patient had come into the operating department was in the Anaesthetic and Operation Record Book.

In both environments the nursing staff focused on physical aspects of patient care and reacted to particular events and demands. In the process of doing so they demonstrated a high level of technical competence, but hardly participated in any social interaction with the patient nor pre-empted potential problems. Rather than assessing, planning, implementing and evaluating care, the nurses were only concerned with implementing care on the basis of emergency re-thinking, crisis management and reaction.

h. Nurses' Perceptions and Construings - Two Case Studies

This section, deals with the construing interviews and the data obtained. The presentation of the data and the results is in two parts. In order to demonstrate the complexity and value of the interview technique adopted, two individual nurse case studies will be presented in some detail. Then the general findings and common construings will be described, discussed and classified.
Case-study 1
To follow this case study easily the reader is advised to refer to Appendix 2. The first case study is based on the construing interview carried out with a 44 year-old theatre sister. She had been involved in the care of all fourteen patients and had been working in the operating department for over ten years. As described previously, details of the patients were typed on to record cards and presented in triads to the nurse.

In the first triad patients 1 and 2 were perceived as similar by this particular nurse and so distinguished from the third. This similarity was expressed in terms of how anxious they would be about their surgery. Patient No.1 was 91 years old and about to have major bowel surgery. The nurse described her as:-
"a poor old soul - she must be really worried in case this is her last".
Here the idea of impending death and old age was perceived as important for the patient. On seeing the details of Patient 2 the nurse exclaimed:-
"Oh! it's the young girl! What a thing to happen as an emergency. She must have been very anxious about the whole thing. Her life has changed with that operation."

Patient 2 was admitted to the ward with an "acute
"abdomen" and was suspected of having appendicitis. In the event, it was discovered that she had extensive ulcerative colitis which required a panproctocolectomy to be performed and an ileostomy to be fashioned.

Patient 3 who was having her colostomy closed was perceived as less anxious because she had undergone surgery previously and also because "she was getting back to normal".

In the second triad patients 2, 3, and 4 were presented. Numbers 2 and 4 were perceived as similar in that "each of these cases required a lot of theatre preparation time beforehand". When this was explored in order to clarify the construct the nurse explained that:

"cases like this are very demanding of nursing time pre-operatively. We have to prepare a lot of equipment, table attachments and whoever scrubs must have a good break before the case starts as they will be there a long time. I also like to be sure and see the patient in the anaesthetic room to have a wee chat". (Before induction of anaesthesia).

This construct of "demanding of nursing time" was used by all theatre nurses. It tended to refer to the amount of time required to prepare for the surgery. Patient 3 was again perceived as different. This time the surgery was
more routine and did not require a lot of preparation. "I don't worry about seeing this kind of patient beforehand. They are really quite easy and not demanding of time".

In the third triad, Patients 4 and 5 were perceived as similar as they required "intensive nursing care post-operatively" whereas patient 3 required "routine post-operative care". Intensive post-operative care was interpreted by this nurse and several others as meaning the monitoring of vital signs, using complex equipment, such as central venous pressure monitors; arterial pressure monitors; intra-venous fluid via calibrated electronic systems; and intra-venous analgesia.

In the fourth triad, patients 4 and 5 were again perceived as similar. This time the similarity was explained in terms of these patients being "ill and dodgy". When this was explored further the nurse explained that each of these women had undergone:"very major surgery and probably won't be cured. Their lives will be shortened. Cancer [as] advanced as this is fatal. They make you feel sad. I wonder why they don't go to their doctors sooner".

On the other hand, according to this nurse, the lady who had undergone the cholecystectomy was perceived as being
cured and had undergone relatively minor surgery. The patients who had surgery for cancer were perceived generally as being in poor health and as having a poor prognosis.

In the fifth triad, patients 5 and 7 were perceived as similar in so far as "there were more chances of complications arising during the operation and definitely afterwards". Patient 6 according to this nurse "would be home soon and would have a good future life. Whereas the other two have a poor prognosis I think".

The sixth triad initially proved difficult as the main similarity was perceived in terms of gender. However after some clarification as to whether the gender of the patient made any difference, the nurse then said that sometimes:-

"I see some of the older men as like my father because he had surgery. But this man he's not like my dad at all. He and Mrs....(patient 7) have had major procedures carried out for no reason really. I feel worried about these patients when they come to theatre in case it's an open-and-shut". By this statement she meant that the cancer had spread so far that there was nothing further that could be done surgically for the patient.

In the seventh triad, patients 7 and 9 were perceived as
similar as "they will have a lot of pain post-operatively". By comparison patient 8, (the man who had a lymph node biopsy performed) was perceived as experiencing little or no pain post-operatively.

In the eighth triad, patients 8 and 9 were perceived as similar as each had undergone investigative surgery and would "need a lot of information about their recovery because they'll both need some other type of treatment, whereas Mr.... (patient 10) would know he was getting better and wouldn't need a lot of information about his recovery. He'd know for himself".

In the ninth triad, patients 10 and 11 were perceived as similar. "I saw these patients before the operation. They were easy to talk to in the anaesthetic room. They had routine surgery". By comparison patient 9 who had his surgery performed under local anaesthetic was less easy to talk to. The nurse stated: - "I don't know what to do with some of these people who have a local and a biopsy. I don't know what to say. They must be thinking the worst and nothing I can say can make it better. I just held his hand." Here the nurse expressed the importance of affective touch when caring for anxious patients.

In the tenth triad patients 10 and 11 were perceived as
similar as she stated that: "they had routine surgery. You don't get the chance to know these people as they are in-and-out quickly. I sometimes see them in the ward when I go through. But I hardly recognise them. Whereas Mr....(patient 12) well I feel I know him alright. He keeps developing complications and comes back to us." Regular patient contact, in this instance, was perceived as enabling a relationship to develop between the nurse and the patient.

In the remaining four triadic presentations, the same constructs were beginning to be repeated but were qualified by some speculation about ward routines in caring for these patients. Notably in the twelfth triad where patients 12, 13, and 14 were compared, patients 13 and 14 were perceived as similar as they had undergone minor surgery whereas patient 12 had major surgery. However the nurse commented that she: "wouldn't know where to start in looking after a TUR [trans-urethral resection of the prostate gland] in the ward. It has been years since I worked in a urology ward". When questioned about caring for other patients in a ward setting she stated: "I'd be OK with patients who had drips but not drains or catheters or lots of monitors. They need intensive nursing care".

On reflection at the end of this stage of the interview
the nurse commented "It makes you think about the patients". In this case study the process of construing enabled the nurse to become consciously aware of her perceptions and thought processes regarding the selected patients.

The next stage of data collection involved the completion of a biographical questionnaire. Whilst the nurse was completing this the constructs and contrasts she expressed were recorded on a grid in readiness for each patient to be scored. Appendix 6 shows the repertory grid obtained for this particular nurse.

A score of 1 indicates that the construct applied STRONGLY, a score of 2 indicated that the construct APPLIED, a score of 3 indicated that the contrast APPLIED and a score of 4 indicated that the contrast applied STRONGLY. Throughout the scoring procedure the nurse had no difficulty applying any of the constructs to the patients (Appendix 6).

On reflection, at the end of the scoring procedure the nurse commented: - "The poor souls I dinnae hae o'er much sympathy with the Chole [cholecystectomy] patients. Wait till it's my turn!" This process of self-reflection and articulation of perceptions was insightful and informative to the nurse. The feelings aroused,
however, required further discussion in order that she could return with confidence to the operating department.

Case-study 2
This reports the construing interview carried out with a 27 year old male staff nurse who had worked in the surgical ward for a year.

In the first triad, patients 2 and 3 were perceived as similar in that they each required a lot of information about their operations and their recovery. Patient 1 was seen as requiring less information as she was older and according to this nurse "seemed to accept things".

In the second triad, patients 2 and 4 were similar in that they were "very demanding of nursing time pre-operatively. They require a lot of physical nursing care. Whereas Mrs....(patient 3) did not."

In the third triad, patients 4 and 5 were perceived as similar in that they each required "specialing" when they returned from theatre, whereas patient 3 required routine nursing care. When asked to explain "specialing" this nurse stated that it meant that: "one nurse is assigned to the patient, to carry out recordings; monitor pulse resprimations and blood pressure; keep the patient comfortable; administer analgesia; and IV fluids as
prescribed." The physical and somatic aspects of care were of concern when "specialing" and in fact nursing interventions which would assist in the psychological well-being of the patient were not mentioned.

In the fourth triad, patients 4 and 5 were similar in that they were asking questions about their recovery. The nurse commented at this stage "I feel guilty about not giving these patients full information about the extent of the cancer". Patient 6 was different in that she never asked questions.

In the fifth triad, patients 5 and 6 were perceived as similar in that they were not anxious about their surgery. Whereas patient 7 who had undergone a diagnostic laparotomy was described as "very anxious about her surgery".

In the sixth triad, where patients 6, 7 and 8 were compared. Patients 7 and 8 were similar in that the nurse stated that he "felt very sympathetic and concerned about these patients whereas I don't feel like that towards Mrs......(patient 6)."

Patients 7 and 8 were perceived as similar in the seventh triad in that they were difficult to talk to. "I have to exercise care when I talk with them in order
not to make them feel more anxious or silly. Whereas with this patient (no.9) although the outlook isn't good he is very aware of the possibilities and seems to understand a lot. I think that's because he's a retired chemist.

In the eighth triad, patients 9 and 10 were perceived as similar because the nurse knew these patients less well than patient 8 who had been in the ward longer. "I know him well and have a good relationship despite the problems around his diagnosis. I feel I know him as a real person". Once again familiarity with the patient and regular repeated contact with the patient (even under such adverse conditions) enabled a more meaningful and personalised relationship to develop.

In the ninth triad, patients 10 and 11 were similar in that they had undergone major surgery, whereas patient 9 had only minor surgery.

In the tenth triad, patients 11 and 12 were perceived as being similar since they each had a good prognosis whereas patient 9 did not.

In the eleventh triad, patients 11 and 13 were similar in that they were "virtually self-caring already. Mr.(patient 12) is still very dependent on the nurses
to help him do most things. In fact the other two are a bit too independent at times".

In the twelfth triad, the patients' (12 and 13) similarity lay in that they were "very appreciative patients and easy to be with. They are always thanking you for what you have done. It is a pleasure to look after these patients. Whereas the other one complains about everything, I don't really like looking after him. That's awful! Isn't it?" At this point the nurse began to realise that his own personal perceptions towards certain patients actually conflicted with his professional ethic.

In the penultimate triad where patients 13, 14 and 1 were compared, patients 13 and 14 were similar in that they were "On the mend. Their disease is curable. Whereas the old lady is not making good progress".

In the last triad patients 1 and 2 were joined. He stated: "I feel very worried about them. They've each undergone surgery which will change their lives completely. My old friend has just had his bladder emptied!!!!!!." (peals of laughter at this point.) This particular nurse began to be embarrassed at being so frank about his dislike of patient 14 who had undergone a cystoscopy for urine retention. Hence the nervous
laughter at the end of this stage of the procedure. When asked how he felt during this interview he stated: "I'm tending to use diagnoses to plan all my care. I can't see how else I could do it. I have to prioritise somehow. This is a very trying process during a busy day. It is quite difficult to accept some of things I have said. It makes you think of patients very differently." Self-reflection for this nurse was an embarrassing and difficult process which required acknowledgement.

As in the first case study whilst the constructs were being recorded on a repertory grid the nurse completed a biographical questionnaire. Once again this nurse had no difficulty in applying each construct or contrast to each patient. As can be appreciated from the case studies the constructs used by both of the nurses had a lot in common despite their different working environments and length of service in the current post. In fact as the next section demonstrates the general range of construings was very similar for all nurses.
i. General Comments on all Construing Interviews

Throughout the construing process the surgical ward nurses tended to perceive the patient in terms of post-operative care. Generally each patient was perceived in terms of physical aspects of care with reference being made to special equipment required; specific regimens and routines which had to be followed; and by a preoccupation with surgical wounds and dressings.

Very little attention was given to the pre-operative needs of any patient. In fact nurses saw the majority of the sample patients as "not demanding of nursing time pre-operatively". The only patients who were perceived as demanding of nursing time pre-operatively were the patients who would undergo major bowel surgery. This was due to the elaborate system of bowel preparation preferred by the consultant surgeons as well as the wide range of surgical instrumentation required. In fact only one ward staff nurse mentioned the importance of information giving both pre- and post-operatively. The impact that information giving can have on pain experiences and the recovery process (Hayward 1975 and Boore 1978) was not fully articulated or expressed by any nurse in the sample. Indeed several nurses stated that they perceived most patients as "not requiring a lot of
information pre-operatively or post-operatively" as the doctor had already informed the patient and would give information about recovery. In this particular ward the medical staff exercised considerable control over information-giving and the sister commented along with other nurses that she felt "guilty about not giving information to patients". The role of the nurse to act as patient advocate was not considered by these nurses.

Certain social factors seemed to play an important part in influencing nurses' perceptions. These were notably the age and sex of the patient and the ease with which the nurse could communicate with the person. Eight nurses thought that age was important and noted that the younger the patient the easier it was for them to cope with mutilating surgery, to recover well, and to accept what had happened. These patients were also frequently perceived as being "too independent for his/her own good". There was no mention by the nurses of a planned recovery process leading towards discharge.

Wide age ranges were clumped together as similar by all nurses. Patients in the age bracket 45-65 were considered as requiring similar care. Whereas the very old (91) and very young (23) were seen as distinct and requiring special care by all nurses. This special care for the ward nurses often amounted to referral either to
the stoma-nurse or to community services. In the case of
the operating department nurses special equipment for
anaesthesia and immediate post-operative recovery were
important.

The sex of patient was not perceived as important by any
nurse. In fact where the surgical intervention was the
same, for instance the two patients who had undergone
cholecystectomies, the perceived needs of the patients
and the social construings of the nurses were similar for
each patient. For example both of these patients were
perceived as having undergone: "straightforward major
surgery"; would be "experiencing some pain"; and it was
anticipated should "make good progress". In these two
cases the type of surgery and the nurses' familiarity
with the surgical procedure influenced the construing
patterns.

Communication was also mentioned by all the nurses. This
focused on the ease of talking with a particular patient;
on whether the patient was always asking questions and
whether the patient complained.

When communication was seen to be difficult, then there
appeared to be a positive avoidance, by the nurses, of
the patient's particular needs. For example the 64 year
old lady who had undergone a diagnostic laparotomy for
abdominal and back pain was perceived as requiring psychiatric help and "should be referred to another hospital". At the time of the construing interviews no pathological cause had been established for her abdominal pain. (Subsequently however a neurological tumour was diagnosed).

It was discerned by several nurses that this patient had a "minor illness" and was "difficult to talk to". Interestingly the only nurse who demonstrated any empathy towards this lady was the man who was in the process of completing the London University Diploma in Nursing. He stated that "she's very nervous. Her mother died recently and she thinks she also has cancer". He found her easy to talk to and a "very appreciative lady".

In this case the patient's anxiety levels and health concerns were not perceived by the majority of nurses. Her regular questioning and need for information was construed as unfounded and requiring psychiatric intervention.

Patients who were considered as making "poor progress" or who had to return to the operating theatre for further surgery were also perceived as having "no future life" and a "fatal disease". When these constructs were explored further it transpired that the nurses thought
that the quality of life for these patients was so poor that there was no hope left for them. The eight nurses who developed these constructs also added that they "felt sad" when caring for them. Two of these nurses also claimed that they were reminded of their father or mother when caring for these patients. In these cases personal constructions and disclosures were overlapping with professional nursing concerns.

No nurse appeared to be instilling hope about the future in either the patient or themselves. In addition several nurses also commented on these patients in terms of their own apprehensions about caring; stating that they "didn't know how to care for" these particular patients. According to the nurses both technical competency and social interactive skills were areas that required to be developed.

For two of the theatre nurses, the names of the patients meant nothing during the construing process. Each of these nurses, however, based her construings on the surgery which had been performed. They could easily recall the surgical process enhanced with anecdotes about the surgeons; the instrumentation preparation; the conversation with the patient either in the anaesthetic room before induction or in the recovery room after surgery. Interestingly the theatre nurses generated
similar constructs to the other nurses but in some cases
the focus and application were slightly different. For
these nurses it appeared that knowledge was impersonal
initially and that theatre nursing and the preparation
for surgery was focal in their construings. For example
the theatre nurses commented on how demanding of nursing
time pre-operatively some patients were. This tended to
mean how much time was required to prepare the operating
theatre and the appropriate equipment rather than the
physical aspects of direct nursing care.

Although surgery such as a neck node biopsy was perceived
as minor surgery by all nurses, the ramifications of this
were more pronounced in the theatre nurses' perceptions.
On the whole the theatre nurses, as distinct from their
colleagues, seemed to be more pessimistic or fatalistic
in their perceptions. They frequently commented on the
poor quality of life left to certain patients. In the
perceptual construings of these nurses the sensationalism
and visual imagery of the actual surgery was very
powerful. To have seen what they saw and then to
transfer that information to the social construing of a
particular person was almost impossible for the theatre
nurses which would suggest that this defensive mechanism
constitutes a coping mechanism for theatre nurses in this
particular context.
j. **The Constructs**

When the individual Repertory Grids were examined in detail, it became evident that they were not unique. Underlying personal constructions and perceptions of patients were common perceptions that each nurse expressed. The possible number of constructs which could have been generated by the ten nurses was 140. In practice only 31 were provided altogether. Of these, 27 were generated by two or more nurses. Table 3 demonstrates the range of constructs and the frequency of usage. As can be seen from the table there were 6 universal constructs for all nurses. These constructs were concerned with perceived patient parameters and included professional judgements and social interactions. There were also eleven constructs generated by more than half of the nurses. These constructs tended to focus on particular aspects of the nurse/patient relationship and included personal disclosures and concerns about the health progress of particular patients. The remaining fourteen constructs were more variable, less frequent in use and less general. These in part encompassed personal disclosures, professional judgements, health progress and social interaction but were more idiosyncratic in reference.
<table>
<thead>
<tr>
<th>CONSTRUCTS GENERATED (in rank order)</th>
<th>No. Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major surgery</td>
<td>Minor surgery</td>
</tr>
<tr>
<td>Demanding of nursing time</td>
<td>Not demanding</td>
</tr>
<tr>
<td>Experiences a great deal pain</td>
<td>Does not experience a great deal of pain</td>
</tr>
<tr>
<td>Needs intensive nursing</td>
<td>Routine nursing care</td>
</tr>
<tr>
<td>Making good progress</td>
<td>Making poor progress</td>
</tr>
<tr>
<td>Anxious about surgery</td>
<td>Not anxious</td>
</tr>
<tr>
<td>Easy to talk to</td>
<td>Difficult to talk to</td>
</tr>
<tr>
<td>Has had life-changing</td>
<td>Routine surgery</td>
</tr>
<tr>
<td>Know the patient as a real person</td>
<td>Don’t know the patient as a real person</td>
</tr>
<tr>
<td>Anxious about recovery</td>
<td>Not anxious</td>
</tr>
<tr>
<td>Dependent on nurses</td>
<td>Self-caring</td>
</tr>
<tr>
<td>Sure of how to care for person</td>
<td>Unsure of how to care for person</td>
</tr>
<tr>
<td>Has a good future life</td>
<td>Has a poor prognosis</td>
</tr>
<tr>
<td>Not independent enough</td>
<td>Too independent</td>
</tr>
<tr>
<td>Makes me feel happy</td>
<td>Make me feel sad</td>
</tr>
<tr>
<td>Worried about</td>
<td>Not worried about</td>
</tr>
<tr>
<td>Like my father/mother</td>
<td>Unlike my father/mother</td>
</tr>
<tr>
<td>Curable disease</td>
<td>Fatal disease</td>
</tr>
<tr>
<td>Comfortable to be with</td>
<td>Uncomfortable to be with</td>
</tr>
<tr>
<td>Needed information about surgery</td>
<td>Did not need information about surgery</td>
</tr>
<tr>
<td>Appreciative patient</td>
<td>Unappreciative patient</td>
</tr>
<tr>
<td>Get a lot of job</td>
<td>Get no job satisfaction</td>
</tr>
<tr>
<td>Always asking questions</td>
<td>Never asks questions</td>
</tr>
<tr>
<td>Feel sympathetic towards patient</td>
<td>Feel unsympathetic</td>
</tr>
<tr>
<td>Enjoy caring for this patient</td>
<td>Dislike caring for this patient</td>
</tr>
<tr>
<td>Has post-op complications</td>
<td>No post-op complications</td>
</tr>
<tr>
<td>Needs nutritional support</td>
<td>Does not need nutritional support</td>
</tr>
<tr>
<td>Makes work meaningless</td>
<td>Does not make work meaningless</td>
</tr>
<tr>
<td>Needs sexual counselling</td>
<td>Does not need sexual counselling</td>
</tr>
<tr>
<td>Unsure of the instruments needed for surgery</td>
<td>Sure of instruments needed for surgery</td>
</tr>
<tr>
<td>Makes me feel stressed</td>
<td>Does not make me feel stressed</td>
</tr>
</tbody>
</table>
k. **Patient Interviews**

After gathering all the interview data on nurses' construings, four patients were asked to participate in a structured interview. The questions asked in this interview were adapted from the questions asked of patients in the 'Rush Medicus' quality of nursing care audit (Jelinek 1974) and the 'Newcastle Polytechnic Monitor' (Goldstone et al 1986). The interview explored key areas of care in order to ascertain how it was understood and perceived by the patient.

Table 4 indicates which patients were selected from the sample population to be interviewed.

<table>
<thead>
<tr>
<th>Patient Code No.</th>
<th>Age (Years)</th>
<th>Sex</th>
<th>Admission Status</th>
<th>Surgery Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>23</td>
<td>F</td>
<td>Emergency</td>
<td>Colectomy</td>
</tr>
<tr>
<td>9</td>
<td>78</td>
<td>M</td>
<td>Elective</td>
<td>Neck node biopsy</td>
</tr>
<tr>
<td>11</td>
<td>39</td>
<td>M</td>
<td>Elective</td>
<td>Vagotomy</td>
</tr>
<tr>
<td>7</td>
<td>64</td>
<td>F</td>
<td>Elective</td>
<td>Laparotomy</td>
</tr>
</tbody>
</table>

A copy of the patient interview schedule is included in Appendix 1 and illustrates the range of topics explored. The questions asked during the interview contained the same meaning as those in Appendix 1 although occasionally
more colloquial expressions were used to facilitate communication. For example question 7d was occasionally expressed as "was anything done to make you feel better?" This is a more colloquial Scottish expression than "was something done to help you feel better?"

The four patients approached were all recovering from surgery and agreed to participate in the interview. Verbal consent was obtained and confidentiality assured. Three of the patients were concerned about confidentiality and asked at the end of the interview who apart from the author would know what they had said. One patient stated that "there's always one nurse on a ward who annoys you. My mother was in .......... and a nurse bad-used her. I complained and got a letter". Clearly fear of retribution was of concern to these patients.

When asked about how they obtained information about the ward events it emerged from the responses that most of the information about the environment of the ward and the location and timings of activities came from other patients. The patient sub-culture, as analysed by Roth (1963a), was very strong, very supportive and provided the bulk of patient recovery orientation and environmental information. In this connection the patients' comments about nurses were often critical and
uninformed about the potential extent of the nursing role.

All four patients were unprepared emotionally for going to theatre. As one person put it "It was the first time I was ever out (unconscious). I've never had the knife before. Nobody told me anything, I'd heard stories from my pals. You're supposed to count. I didn't have to count".

The folklore or popular versions about hospitals were uppermost in this patient's thoughts. The only information given to this particular patient came from his friends. Neither the nursing nor medical staff provided pre-operative information about the process of going to theatre.

Three patients spoke of "trying to fathom things out for themselves" but this was often confusing and led to an increase in anxiety. Three patients stated that:-  
"I want to know. I'm not sure if they (doctors and nurses) listen. Naebody's sayin' onything aboot them. The tests - I don't care if they're clean but I want to know!"

These patients were in hospital for diagnostic surgery and were perceived by the nurses as undergoing minor
surgery and generally being quite difficult to talk to. Clearly these patients were anxious and felt that their anxieties were not being catered for.

The answers to the questions about relationships with the nursing staff indicated that in two cases there was a special nurse who cared for them, but even these two patients commented that all nurses were generally the same. When questioning the patients who indicated that there was a special nurse one explained this particular feature by saying "Tonight one just patted me on the back when I was sitting down to tea. That was special".

The other patient said "Nurse...... will get you anything you need". Specialness in these cases involved social skills; demonstrations of affection; and identifying and obtaining what the patient wanted.

All patients were interviewed when their recovery was well advanced namely three or four days following surgery. Their knowledge, however, about the recovery process was restricted. None of those interviewed knew what to expect. Three patients said that their family doctor had informed them that they would be off work for a time or that they would have to take care when they came home. No patient knew what sort of care or help might be needed at home.
Consequently, at the end of the interview each patient asked the researcher about the recovery process. As a result of this pilot the questions were resequenced and the recovery questions were incorporated earlier in the interview.

In order to meet the needs of the patients, permission was obtained to ask the nurse-in-charge to explain a little about the recovery process. Fortunately the nurses had been informed previously that the patients might ask questions that could not be answered by the researcher and would, with the patient's permission, be referred back to the nursing staff. Only one of the four patients accepted the offer of intervention. The other three patients said that they would ask themselves later. From observation and informal discussions it was subsequently learned that these patients did not later enquire about their recovery.

The objectivity of the researcher is an ideal which is difficult to sustain when there is a conflict of roles. To a professional nurse who is competent within surgery the needs and demands of patients must be paramount. Whereas as a researcher who has been educated in scientific objectivity, the obligation not to interfere with the experiment raises contradictions. Helping the
patient with information AFTER questioning them, however, raises no methodological problems in a study such as this.

1. **Conclusion to Elicitation Stage**

From the patient interviews it appeared that communication standards and levels of knowledge about certain issues were very low. Patients generally felt that they had received little or no information about many aspects of their hospitalisation and care. The nurses on the other hand had perceived the majority of patients as not requiring much information about the surgery or the recovery process.

The results of the nurses' interviews indicated that there was a common core of perceptual constructs deployed by surgical nurses when making decisions about nursing care. These constructs were considered, by the present author and demonstrated by the nurses' actions and the patients' interviews, to be inter-related in the process of nursing.

When a classification typology was imposed upon the constructs generated it was evident that the perceptions could be ordered and arranged in terms of:- social interaction between nurses and patients; nursing professional judgements; psychological care attributes of
the patient; the perceived health progress of the patient; and the personal feelings of the nurse.

The general findings from the nurses construing data, indicated that there were FIVE types of constructs being used by nurses and a common pool of constructs within these types. These findings confirmed earlier work carried out by Adams-Webber (1979) and identified in Kelly's original thesis (1955) namely, there is not an infinite number of perceptual constructs used to anticipate or understand events or people. In this research the present author has identified and classified the five types of constructs. It is contended that these construct sets provide a framework for analysing nursing from the perspective of the practising nurse in acute surgical environments.

The classifications of constructs and contrasts which emerged are as follows:

1. **SOCIAL INTERACTION CONSTRUCTS**

Very easy to talk to.  
Appreciative patient.  
Is very comfortable to be with.  
Enjoy caring for this patient.  
Know the patient as a real person.

Very difficult to talk to.  
Complaining patient.  
Is very uncomfortable to be with.  
Dislike caring for this patient.  
Do not know patient as a real person.
2. **PROFESSIONAL JUDGEMENT CONSTRUCTS**

Very dependent on nurses for all activities of living. Self-caring.

Experiences a great deal of pain. Experiences no pain.

Requires intensive nursing care post-operatively. Requires routine nursing care post-operatively.

Was very demanding of nursing time pre-operatively. Not demanding of nursing time pre-operatively.

Very sure of how to care for this patient. Very unsure of how to care for this person.

3. **PSYCHOLOGICAL-CARE CONSTRUCTS**

Very anxious about surgery. Was not anxious about surgery.

Is very anxious about recovery. Not anxious about recovery.

Not independent enough. Too independent.

Needed a lot of information pre-operatively. Needed no information pre-operatively.

Always asking questions. Never asks questions.
4. HEALTH PROGRESS CONSTRUCTS

| Has undergone very major surgery. | Has undergone very minor surgery. |
| Has a good future life. | Has a poor prognosis. |
| Has undergone life-changing surgery. | Has undergone routine surgery. |
| Has curable disease. | Has fatal disease. |
| Is making very good progress. | Is making very poor progress. |

5. PERSONAL CONSTRUCTS

| Makes me feel happy. | Makes me feel sad. |
| Is very like my father/mother. | Is very unlike my father/mother. |
| Feel very sympathetic towards. | Feel very unsympathetic towards. |
| Get a lot of job satisfaction from nursing this patient. | Get no job satisfaction from nursing this patient. |
| Feel very worried about. | Do not feel worried about. |

The typology has been devised by the author but the classified constructs were derived from the elicitation carried out with the sample nurses. The full theoretical and analytical implications of this typology will be developed in subsequent chapters.
In conclusion it has been shown that there were a finite number of constructs which were generated by these nurses. Therefore, it was decided to standardise the constructs and test them on a small sample of nurses in another hospital. Since common perceptions were expressed it was necessary to investigate systematically the commonality of construings amongst surgical nurses.

Consequently the validation stage of the research was set up in order to test for variation in construing of cardiothoracic patients by nurses involved in caring for them. It was decided to randomly present the construct statements (presented in Table 3) which were elicited from two or more of the sample nurses in order that they could be standardised and validated. The more idiosyncratic constructs were discarded as they applied to only one nurse and one patient.

Furthermore it could be argued that these specific and idiosyncratic construings are implicit within some of the common construings. For example nutritional support could be part of the construct on nurse dependency; post-operative complications could be part of the construct on progress; and surgical instrumentation could be included in the construct demanding of nursing time.
The next stage in the research involved validating these constructs with nurses working in cardio-thoracic areas. The other research instruments tested, namely the biographical questionnaire and the interview schedule for patients, were suitable for use in the validation and main studies with little or no modification.
4.2 THE VALIDATION STAGE

a. Introduction

The first stage of the research elicited and identified the common constructs used by nurses working in surgery. These constructs fell into 5 general types which have been described follows:-

Social interaction constructs
Professional judgement constructs
Psychological care constructs
Health progress constructs
Personal constructs

The importance of such patterns of construing for understanding the nurse/patient relationship requires to be investigated further. For, if these constructs are useful and meaningful to nurses working in surgery then it should be possible to analyse and develop nursing and nurses by using the framework above. As the objective types have been classified by the researcher it is necessary to ensure that the patterns of construing are valid according to the subjects' own perceptions. To this end the constructs must be heuristic in the research.

The verification stage of this research required that
these constructs were tested on a population of nurses working in one specific field of surgery. The aim of this stage was to determine the variation and the application of these constructs by nurses working in the speciality of cardio-thoracic surgery.

b. **Sampling Procedure - Nursing Staff**

This stage of the project took place in Hospital A which was to be included in the Main Study. All of the nurses who participated in this stage were selected because they would not be available to participate in the Main Study. The reasons included annual leave; post-basic education plans; and leaving existing employment.

Permission to undertake the study and access were negotiated through the Joint Ethical Committee of the Health Board and the University, and through consultations with senior medical and nursing staff. Each of the five nurses approached to participate were personally asked for their consent and were given the opportunity to withdraw at any time. All nurses participated for the duration of the study.

As the patient interview schedule had been tested previously and proved to be effective in providing an overview of patients' understandings and concerns it was decided not to re-test this questionnaire. Rather it
was used to gain insight into the understandings of two randomly chosen patients from the purposive sample.

Table 5 demonstrates the biographical background of the nurses in the sample population for the validation stage.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Grade</th>
<th>Work-place</th>
<th>Age</th>
<th>Sex</th>
<th>Duration</th>
<th>RGN</th>
<th>Post-place</th>
<th>Course</th>
<th>Study-place</th>
<th>basic</th>
<th>days.</th>
<th>post.</th>
<th>course.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre</td>
<td>26</td>
<td>F</td>
<td>6mnth</td>
<td>Degree</td>
<td>Theatre</td>
<td>Nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ward</td>
<td>33</td>
<td>F</td>
<td>9mnth</td>
<td>Conver</td>
<td>Cardiac</td>
<td>Nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITU</td>
<td>39</td>
<td>F</td>
<td>6yrs</td>
<td>3 year</td>
<td>None</td>
<td>Lot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ward</td>
<td>29</td>
<td>F</td>
<td>2yrs</td>
<td>3 year</td>
<td>Cardiac</td>
<td>Nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery</td>
<td>37</td>
<td>F</td>
<td>7yrs</td>
<td>Degree</td>
<td>None</td>
<td>Nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend

S/N = Staff nurse (First level nurse)
C/N = Charge nurse or sister.
ITU = Intensive Care Unit.
E/N = Enrolled nurse
Conver = Conversion from E/N
c. **Sampling Procedure - Patients**

The patients included in this stage of the study were selected according to the same criteria which have been set out earlier in this chapter. Table 6 gives details of the sample population of patients selected for participation in the validation study at Hospital A.

<table>
<thead>
<tr>
<th>No.</th>
<th>Age (Years)</th>
<th>Sex</th>
<th>Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>M</td>
<td>Oesophageal resection</td>
</tr>
<tr>
<td>2</td>
<td>52</td>
<td>M</td>
<td>CABG*3</td>
</tr>
<tr>
<td>3</td>
<td>55</td>
<td>F</td>
<td>Mitral valve replacement</td>
</tr>
<tr>
<td>4</td>
<td>28</td>
<td>M</td>
<td>Pleurodesis</td>
</tr>
<tr>
<td>5</td>
<td>72</td>
<td>M</td>
<td>Oesophageal resection</td>
</tr>
<tr>
<td>6</td>
<td>51</td>
<td>F</td>
<td>CABG*2</td>
</tr>
<tr>
<td>7</td>
<td>56</td>
<td>M</td>
<td>Sternotomy</td>
</tr>
<tr>
<td>8</td>
<td>53</td>
<td>M</td>
<td>Bronchoscopy</td>
</tr>
<tr>
<td>9</td>
<td>72</td>
<td>M</td>
<td>Aortic valve replacement</td>
</tr>
<tr>
<td>10</td>
<td>66</td>
<td>M</td>
<td>CABG*4</td>
</tr>
</tbody>
</table>

**Legend**

CABG*n = Coronary Artery By-pass Graft and the number of graftings.
d. Administrative Procedure for Supplying Constructs

The procedure adopted in this pilot study was markedly different from the original elicitation stage of the study. Here the constructs elicited from the first stage were supplied to the nurses and each nurse was asked to rate (on a 1-4 scale as previously described) each patient according to each construct. The constructs were randomly sequenced for presentation (Table 7). Dialect variations were amended and formal English improved for ease of communication. The details of the patients to whom the constructs were being applied were typed onto record cards as described previously. To prevent boredom and loss of interest by the nurse and also to ensure the optimum validity of the research tool, the application of constructs to patients was carried out by means of an interview and the investigator recorded the allocated score. For example the researcher stated "tell me about Mrs.... is she easy to talk to or difficult to talk to? (Pause whilst nurse described the patient in these terms). On a score of 1 to 4, 1 being easy to talk to, 4 being difficult to talk to, what would you give her?"

As in the elicitation stage the nurses were asked to complete the biographical data questionnaire and were interviewed about their understanding of care-planning.
<table>
<thead>
<tr>
<th>No.</th>
<th>CONSTRUCTS</th>
<th>CONTRASTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Very easy to talk to.</td>
<td>Very difficult to talk to.</td>
</tr>
<tr>
<td>3.</td>
<td>Always asking questions.</td>
<td>Never asks questions.</td>
</tr>
<tr>
<td>4.</td>
<td>Feel very worried about.</td>
<td>Do not feel worried about.</td>
</tr>
<tr>
<td>5.</td>
<td>Is making very good progress.</td>
<td>Is making very poor progress.</td>
</tr>
<tr>
<td>7.</td>
<td>Experiences a great deal of pain.</td>
<td>Experiences no pain.</td>
</tr>
<tr>
<td>8.</td>
<td>Was very anxious about their surgery.</td>
<td>Was not anxious about surgery.</td>
</tr>
<tr>
<td>9.</td>
<td>Is very anxious about their recovery.</td>
<td>Not anxious about their recovery.</td>
</tr>
<tr>
<td>10.</td>
<td>Was very demanding of nursing time pre-operatively.</td>
<td>Not demanding of nursing time pre-operatively.</td>
</tr>
<tr>
<td>11.</td>
<td>Needed a lot of information pre-operatively.</td>
<td>Needed no information pre-operatively.</td>
</tr>
<tr>
<td>12.</td>
<td>Has undergone very major surgery.</td>
<td>Has undergone very minor surgery.</td>
</tr>
<tr>
<td>14.</td>
<td>Requires intensive nursing care post-operatively</td>
<td>Requires routine nursing care post-operatively</td>
</tr>
<tr>
<td>17.</td>
<td>Not independent enough.</td>
<td>Too independent.</td>
</tr>
<tr>
<td>18.</td>
<td>Makes me feel happy.</td>
<td>Makes me feel sad.</td>
</tr>
<tr>
<td>20.</td>
<td>Is very comfortable to be with.</td>
<td>Is very uncomfortable to be with.</td>
</tr>
<tr>
<td>21.</td>
<td>Enjoy caring for this patient.</td>
<td>Dislike caring for this patient.</td>
</tr>
<tr>
<td>22.</td>
<td>Feel very sympathetic towards.</td>
<td>Feel very unsympathetic towards.</td>
</tr>
<tr>
<td>23.</td>
<td>Feel I know the patient as a real person.</td>
<td>Do not know patient as a person.</td>
</tr>
<tr>
<td>24.</td>
<td>Very sure of how to care for this patient.</td>
<td>Very unsure of how to care for this person.</td>
</tr>
<tr>
<td>25.</td>
<td>Get a lot of job satisfaction from nursing this patient.</td>
<td>Get no job satisfaction from nursing this patient.</td>
</tr>
</tbody>
</table>
e. **Nurses' Construing Interviews**

The results from these five interviews indicated that the nurses were able to make judgements about the patients based on the supplied constructs. The grids obtained at the end of the interview procedure were analysed for similarity in construing. All scores were added for each nurse and the overall mean score for each nurse obtained. Table 8 shows the mean score for each nurse.

<table>
<thead>
<tr>
<th>Validation Stage</th>
<th>Nurse</th>
<th>Workplace</th>
<th>Overall Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=5</td>
<td>1</td>
<td>Theatre</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Ward</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>ITU</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Recovery Room</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Ward</td>
<td>2.2</td>
</tr>
</tbody>
</table>

As can be seen, with the exception of the recovery room nurse, the mean score on all constructs for each nurse was similar. This was an important finding for the next stage of the research as one of the research questions to be answered was do nurses working in different contexts perceive patients similarly?

Table 9 compares the mean score for each patient with each nurse. As can be seen from the table the most
marked difference between the means is for the scores obtained from nurse 4 working in the Recovery Room. This particular nurse was applying the construct end of the construing statement more frequently than any other nurse.

Table 9: Mean Construct Score for Each Patient by Each Nurse - Validation Stage

<table>
<thead>
<tr>
<th>NURSE</th>
<th>PATIENT CODE NUMBER</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>1t 2c 3c 4t 5t 6c 7t 8t 9c 10c c t ALL</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2.8 1.9 1.7 2.1 3.2 1.7 2.2 2.8 1.7 1.7 2.6 2.2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2.8 2.6 2.0 2.6 2.4 2.0 1.8 2.0 2.3 1.8 2.1 2.3 2.2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3.1 1.9 1.8 2.3 3.1 1.9 1.9 2.2 2.0 1.9 1.9 2.5 2.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.7 1.4 1.4 1.9 1.5 1.4 3.0 1.3 1.0 1.6 1.3 1.8 1.6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2.9 2.4 2.1 2.1 2.5 2.2 1.6 2.2 2.4 1.8 2.2 2.2 2.2</td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>2.6 2.0 1.8 2.2 2.5 1.8 2.1 2.1 1.8 1.8 2.3 2.3 2.2</td>
<td></td>
</tr>
</tbody>
</table>

Legend t = thoracic surgical patients. c = cardiac surgical patients.

If the mean scores for patients who have undergone cardiac surgery are compared with the mean scores for those patients who have undergone thoracic surgery then it can be seen that the overall mean score for cardiac patients is 1.8 and for thoracic patients 2.3 for all nurses in all contexts. This invites the question do nurses perceive patients in terms of the type of surgery performed? The similarity of scores for the surgical
ward nurses is also remarkable and invites the question are there similarities in perception between nurses who work in a particular context?

From this small sample of five nurses and ten patients when the data was ranked for analysis the highest mean scores were given by the two nurses working in the surgical ward. This indicated that these nurses tended to verge towards the contrast end of the construing statements rather than the construct. But on the whole the allocated values of the constructs for particular patients are quite similar. Again this was an important finding to be investigated further in the next stage of the research. No single patient at this stage seemed to have been perceived in significantly different terms.

For all constructs a correlation matrix (Appendix 7) was developed in order to identify the relationship between construct statements. Assuming that whenever there is a perfect association between variables (in this case construing statements as demonstrated in Table 7) the correlation co-efficient indicates its theoretical maximum of unity (i.e. the value 1) though this notional perfect score is never realised in practice. Complete independence between statements results in a correlation co-efficient score of zero. In between lie the values of the co-efficient for most investigations, positive if
the association is direct and negative if the association is inverse.

From an examination of the matrix the value of each correlation co-efficient lay between zero and one. A high value correlation co-efficient indicates that the constructs may be closely associated and could be omitted, as in practice they may have the same meaning to particular nurses. There were a few high values of 0.98 for certain constructs, but as these were within the same type of constructs it was decided not to eliminate any. Within any one of the five typologies a close correlation was anticipated. Each construct could be considered independent and distinctive yet interrelated. As only five nurses were involved in this stage of the research the inter-relationships between construct groupings and/or individual constructs were not examined fully. This will be examined closely in the main study.

During the interview process the nurses often elaborated on the construing statements. Each nurse had no difficulty applying the constructs but often qualified or elaborated upon the statements. This in itself helped to validate the constructs in terms of meaning and application. These elaborations often resembled those explanations and statements given by the nurses in the elicitation stage of the study.
Within the individual grids the nurses tended to perceive the thoracic patients more in terms of poor health progress than the cardiac patients. These patients were also perceived as being slightly more difficult to communicate with and as being demanding of nursing time. Although as stated previously the variation at this stage was not significant.

Interestingly 4 out of the 5 nurses commented that they got less job satisfaction from caring for the thoracic patients compared with the cardiac patients. As one nurse commented "Mr...... is miserable and feeling unwell whereas Mr..... is happy and making good progress".

One sister in ITU commented that "this interview makes you think about the patients and admit things, you wouldn't normally. The cardiac patients see themselves as cured but the majority of thoracic patients are psychologically damaged".

This statement was understood as referring to the emotional well-being of a patient who has cancer. The "psychological damage" referred to was the patient's acceptance or denial of the disease process and the nurse inferred that cancer was perceived by the patients as
being indicative of death.

Although the distress experienced during the interview process by these nurses, was noticeably less than that evinced by their colleagues in the elicitation stage, the need for support and counselling was still evident. Clearly these construing statements evoked feeling states and thoughts about patients which concerned the nurses.

The construing statements were intended to explore the practical and perceptual patterns underlying the process of nursing. Nurses tend to focus on things to do to patients or tasks to be carried out rather than reflect on various aspects of practice or care. Requesting the nurse to apply these constructs to real patients in her care places demands upon the nurse to be critically self-aware and reflect on her relationship with particular patients. By doing so the investigator can begin to understand and develop an analysis of the actual process of nursing.

When interviewed about their understanding of care-planning, these nurses commented that physical and psychological aspects of care were important. When each of these ideas was explored it transpired that by physical care each nurse meant the process of carrying out specific recordings and monitoring particular signs
for each patient. The preparation of the physical environment was also commented upon by each nurse. Furthermore the preparation of surgical instrumentation and the preparation of monitoring equipment was described as essential to care-planning in the operating department and intensive care unit respectively.

When referring to psychological care the nurses mentioned reassurance of the patient about the forthcoming surgery and/or the recovery process. The term 'reassure' was used by the nurses rather than inform, or share, or relieve. In practice this reassurance tended to mean offering or stating platitudes to patients. From observation and interviews, no attempt was made to enter into the patient's frame of reference. One nurse commented that those patients who had undergone major thoracic surgery for cancer "Know the score. You don't need to tell them anything. They know what the situation is like".

The concepts inherent in empathetic understanding and the development of trust were not articulated by any of the five nurses interviewed.

f. Patient Interviews

Only two patients from the sample population were approached and asked to participate in the interview
process. The purpose of these interviews was not to test the research tool (the interview schedule) but rather to gain insight into any corroborations or contradictions between the nurses' construings and the patients' understandings.

Patients number 1 and 10 were randomly selected for interview. According to the analysis of the construing grids these two patients seemed to be perceived in slightly different ways. Patient number 1 had undergone major thoracic surgery for cancer of the oesophagus and was interviewed on the 5th post-operative day. This patient had generally obtained most of his information about the ward from other patients. He stated that he had been given enough information about his illness from the doctors but did not know what to expect when he went home. There was no special nurse for him in the ward. "I only see them when they come to take my pulse. Once I'm on my feet I'll get to know them better."

When asked about his experiences of pain and nausea he said that he was given tablets or an injection "if it is time. Otherwise they just change my position".

This patient was generally construed in the following ways:- demanding of nursing time, making poor progress,
slightly difficult to talk to, appreciative of the nursing care, sometimes asked questions, and experienced some pain. Three nurses stated that they were unsure of how to care for this man.

Whereas patient number 10 had undergone extensive coronary artery by-pass grafting and was interviewed on the third post-operative day. He stated that he had obtained information about the ward from other patients and by observing what was happening. The doctors had told him about changing his lifestyle and taking more exercise. There was a special nurse for him and that was the Cardiac Sister who came in specially to visit him and had invited him to attend the Coffee Club before his surgery. The Coffee Club was a venue, organised by the Cardiac Liaison Sister where former cardiac patients could meet with those about to undergo surgery and share knowledge and experiences.

This patient was generally perceived by the nurses as easy to talk to, quite appreciative, self-caring, not anxious about his surgery or recovery. All nurses felt very sure of how to care for this man.

The patient interviews at this stage of the research began to identify possible contra-distinctions in perceptions and understandings by nurses and patients.
This was important for the next stage of the study which would identify further the contra-distinctions.

4.3 Concluding Comments
The elicitation stage of the research has demonstrated that there are a few clear types of perceptual constructs used by nurses working in surgery to describe particular patients. This is important as it allows a pattern of construings to be standardised and tested with other nurses. The second stage of the research involved testing these constructs on a small sample of nurses.

If the following types of validity and reliability are considered then it becomes apparent that these standard or core constructs are meaningful and of value to nurses working in surgery.

4.4 Construct Validity
The correlation matrix (Appendix 7) demonstrates internal coherence and external distinctiveness. The independent nature of the construct statements is exemplified and the commonality of use by nurses is evident when means are compared (Tables 8 and 9).

4.5 Transformational Validity
Personal or elicited constructs were contained within the construct statements supplied. This can be seen by
the application of these constructs with apparent ease by all nurses and the elaboration of the constructs by some nurses in order to develop the semantics. For example one nurse when asked to apply the construct, "very comfortable to be with - not very comfortable to be with" elaborated this by the time of day with reference to patient number 4, (the 28 year old who had surgery for recurring pneumothorax). She said that he was comfortable to be with first thing in the morning but as the day progressed he became "not uncomfortable to be with but difficult because he got bored and expected you just to suit him. Also after his visitors had left he would start teasing you about your looks or clothes or something".

4.6 **Clinical Validity**

This can be explained in terms of the clinical application of the construct statements to the patients being cared for at the time of investigation. The constructs form the foundation of the nursing process and correspond to the comments made by the nurses when describing care-planning and when commenting on the interview process.

4.7 **Face Validity**

No construct statement had to be explained to any nurse. The linguistic expression was taken as self-evident and
meaningful despite slight cultural differences between the two sample populations.

4.8 **Reliability**

The reliability of the procedure was demonstrated through the standardisation of the method and the application of the constructs by all nurses, the similarity of the construing patterns for each patient and the results obtained. The value of supplying constructs must not be underestimated. There is no need to elicit afresh for each subject and engage in a long and elaborate interview process. Rather supplied constructs ensure consistency in method and context as already investigated and confirmed. For these reasons the same standard construct statements were presented in the same order as in Table 7 in each part of the Main Study. An analysis will be presented which illustrates the value of these statements to actual nursing care.
CHAPTER 5

Nurses' Perceptions of Patients
In an
Established Cardiothoracic Unit:
Quantitative Data Analyses.
5.0 Introduction

Each section of this chapter deals with a key stage of the analysis. Such an approach is necessary for two reasons; firstly in order to appreciate the methodological significance of the investigation and secondly to fully present and analyse the complex data-sets which were obtained.

The sections of the chapter are as follows:-
- The hospital setting and access.
- Sampling procedure for both nurses and patients.
- Administrative procedure.
- Biographical data and care-planning.
- Nurses' construings and perceptions.

These sections constitute the main quantitative analyses carried out. The more qualitative analysis will be presented in a separate chapter. In this the patient interviews, the case studies and the clinical and professional implications of the construing results will be considered.

5.1 The Hospital Setting and Access.

The hospital where the first part of the Main Study was carried out, was a large teaching hospital in the Central Belt of Scotland. There were 650 beds in the hospital and a wide range of specialities were
provided. There was a nursing college, university medical and dental schools, a school of physiotherapy and a school of radiography connected to the hospital. Students from each of these disciplines obtained clinical experience within the hospital.

Patients attended the hospital from the Central Belt and as far south as the Borders for some specialist services. The cardiothoracic unit was well-established and had been functioning as a centre of excellence for many years. At the time of investigation patients from all over Scotland were referred to this hospital for cardiac surgery. This procedure has subsequently changed as cardiac provision has expanded. The main catchment area for cardiac patients is now, in 1992, essentially the Central Belt.

In the course of a year, according to hospital-based records and Scottish In-Patient Statistics (1991), over 500 cardiac operations and 300 thoracic operations were performed. These figures do not include diagnostic investigations such as bronchoscopies, oesophagoscopies, cardiac catheterisations or angioplasties, but do include all other surgical interventions. If these investigative procedures and treatments were to be included then the figure would almost double for each type of surgery.
In this hospital cardiac surgery and thoracic surgery were performed by the same consultant surgeons in the same operating theatre with the same theatre nursing staff. The patients were cared for in the same surgical ward and often in the same high dependency or intensive care unit again with the same nursing staff caring for both thoracic and cardiac patients. The admission procedure for surgical patients had been routinised as follows: normally patients were admitted to the surgical ward at least the day prior to surgery and sometimes two to three days previously if their general health was poor. On the day of surgery the patient was taken to the operating department and generally waited in a holding area adjacent to the recovery room before being transferred to the operating theatre.

Following surgery each patient was then transferred for the immediate post-operative period to the recovery room located within the operating department. After a certain length of time the patient was then taken to the intensive care unit for a specified period of time before being transferred back to the surgical ward. The patient would have spent some semi-conscious time in five different clinical environments. These changes of environment may have taken place in a 48-
hour period when the individual was already anxious and at times only semi-conscious. The duration of time spent in any one environment by any single patient was usually determined by the well-being of the individual patient and by his/her progress according to a pre-determined protocol of progress and recovery. This protocol relied upon complex monitoring of vital signs, medical judgement and investigative procedures such as chest x-rays, and blood gas analyses.

Patients who did not require specialist intensive care following surgery were transferred directly from the recovery room to the surgical ward. Again certain criteria must have been fulfilled before a patient is transferred. The standard for transfer was based on indicators such as the vital signs of the patient; signs of haemovolemic stability and/or signs of physiological distress. If these measures were within normal limits and the patient's physiological condition was assessed to be stable then he or she was transferred to the surgical area. If the patient was unstable physiologically then the he or she would remain in the recovery area or be transferred to the intensive care unit.

From discussions with senior nurse managers, qualified nurses who were employed in the hospital generally
requested, and were placed with, a speciality. Once within a speciality the individual nurse participated in a staff development programme. In the case of ward based and/or intensive-care based nurses who worked in cardiothoracic this programme involved the nurse working a rotation system in the intensive care unit, and the surgical ward for both day and night duty. Theatre nurses and recovery room nurses did not participate in this programme.

The nursing services manager for the ward and the intensive care unit explained the programme in terms of increasing the clinical experience of each nurse in order that he/she could provide a comprehensive system of patient care. She did not mention continuity of patient care as a reason. In fact the allocation of staff to this programme was decided by logistical staffing requirements not by patient need.

The reasons given for the exclusion of the theatre and recovery room nurses from the programme were threefold. Firstly, the medical staff liked regular and competent theatre scrub nurses. Secondly, the theatre nurses did not want to work in the ward and the ward nurses did not want to work in the theatre. Thirdly, the recovery room nurses could have been included in the programme and were quite interested in participating.
Unfortunately these nurses were involved in caring for all surgical patients not only the cardiothoracic patients and therefore could not be released into one speciality rotational programme. The recovery room was generic and received all surgical patients for the immediate post-operative period. In any one day this could have involved sixty patients.

Student nurses were allocated to the surgical ward and the operating theatre for experience. At the time of investigation they did not spend any time in the recovery room or in the intensive care unit. Enrolled nurses were only employed in the surgical ward and nursing assistants were only employed in the operating theatre and in the surgical ward.

The particular surgical ward involved had 24 beds. Both men and women were cared for on the ward. The majority of patients were admitted for elective surgery although emergency procedures were also catered for. From ward based resource management statistics the bed occupancy was normally 95% in any month and the average length of stay for all patients was 5 days. The ward was designed in 'racetrack' layout. There were six single rooms and three six-bedded rooms with the utilities and nursing station located centrally.
The operating theatre was part of a large theatre suite of six theatres, holding area and recovery room. The daily throughput of patients for the entire operating department was on average sixty. The average number of patients having surgery in the cardiothoracic theatre each day was eight. The recovery room had facilities to care for 15 unconscious patients and to hold six patients before surgery. Adjacent to the operating theatre was the intensive care unit for cardiothoracic patients only. Within the unit there was sufficient space and equipment to care for six patients.

Prior to commencing the study a research submission was made to the Joint Ethical Committee of the hospital and the university and approval was granted. In addition senior medical and nursing staff were consulted and confidentiality and anonymity assured. Verbal consent was obtained from individual nurses and patients who participated in the study and the right to withdraw at any stage offered. All nurses and all patients who were invited to participate did so. No-one subsequently withdrew. Throughout the chapter this particular hospital will be referred to as Hospital A.
5.2 Sampling Procedure - Nursing staff

A sample was chosen of 27 first-level nurses involved in caring for cardiothoracic patients. This sample consisted of all registered nurses working in the relevant surgical ward, the cardiothoracic theatre, the intensive care unit, and the recovery room at the time of investigation. The staffing establishment for these areas totaled 32 nurses but five nurses participated in the validation study and were therefore excluded from the main study. Table 10 illustrates the sample obtained and the establishment figures.

Table 10: Sample Population by Nursing Grade and Establishment Figures - Hospital A

<table>
<thead>
<tr>
<th>N=27</th>
<th>Grade Achieved</th>
<th>Sample</th>
<th>Maximum</th>
<th>Establish</th>
<th>as % of 2</th>
<th>as % of 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Charge Nurses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>14</td>
<td>14</td>
<td>93%</td>
<td>93%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Staff Nurses</td>
<td>14</td>
<td>18</td>
<td>18</td>
<td>77%</td>
<td>77%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>27</td>
<td>32</td>
<td>32</td>
<td>84%</td>
<td>84%</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from Table 10 the maximum possible sample of first level nurses (that is all Charge Nurses...
and Staff Nurses) was obtained.

5.3 **Sampling Procedure - Patients**

In the Main Study, as in the Elicitation and Validation Stages, the same criteria for sampling patients applied. This purposive sampling technique was necessary in order to ensure that all sample nurses had cared for each patient in the sample, and so that each patient could be interviewed post-operatively whilst in hospital. At the time of investigation there were 23 patients in the surgical ward, ten of whom fulfilled the criteria set. Table 11 provides details of the sample population of patients.

As can be seen from Table 11, five patients who had undergone cardiac surgery and five who had undergone thoracic surgery were selected. At the time of investigation there were only six female patients in the ward. Hence the smaller number of women in the sample compared with men. This does however reflect the epidemiological proportion for coronary artery disease, lung cancer and oesophageal cancer. The twenty three patients in the ward ranged in age from 30 to 72 years. The mean age for all patients was 55 years and for the sample population of patients 53 years.
Table 11: Sample Population of Patients - Hospital A

N=10

<table>
<thead>
<tr>
<th>No.</th>
<th>Code</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Admission Status</th>
<th>Surgery Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>59</td>
<td>M</td>
<td>Elective</td>
<td>CABG * 3</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>57</td>
<td>F</td>
<td>Elective</td>
<td>CABG * 3</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>42</td>
<td>M</td>
<td>Elective</td>
<td>CABG * 3</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>66</td>
<td>F</td>
<td>Elective</td>
<td>CABG * 3 &amp; Mitral Valve Replacement</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>30</td>
<td>M</td>
<td>Emergency</td>
<td>CABG * 3</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>41</td>
<td>F</td>
<td>Elective</td>
<td>Right fenestration of chest wall</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>46</td>
<td>M</td>
<td>Elective</td>
<td>Oesophago-gastrectomy</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>50</td>
<td>M</td>
<td>Elective</td>
<td>Bronchoscopy</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>72</td>
<td>M</td>
<td>Elective</td>
<td>Oesophago-gastrectomy</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>71</td>
<td>M</td>
<td>Elective</td>
<td>Repair of pharyngeal pouch</td>
</tr>
</tbody>
</table>

Legend

CABG* = Coronary Artery By-pass Graft and the number of graftings carried out.
to. All 27 interviews were carried out over eight days. This would not have been possible without the support of the nurse manager and the constant availability of the investigator.

5.5 Administrative Procedure - Patients
All ten patients were approached and asked if they would participate in an interview about their stay in hospital. Each patient agreed to participate and the interviews were scheduled for the third post-operative day or later if the patient was unwell. This proved to be an important decision as the throughput of patients in Hospital A was extremely fast. The average length of time for a patient to remain in hospital following coronary artery by-pass grafting was 5 days. Patients who had undergone major thoracic surgery were generally discharged to convalescence 7 days following surgery and those patients having diagnostic investigations were either discharged the following day or transferred elsewhere for appropriate treatment.

The interview schedule devised for patients (Appendix 1) was constructed as stated previously, using ideas contained within several quality assurance documents. The range of questions was chosen in order to encourage the patient to comment on various aspects of care and to attempt to demonstrate any differences between the
patient's account of his or her care, and the nurses' construings of the patient. The timings of the interviews were arranged in accordance with ward routines and patient care. This necessitated that the investigator was familiar with the working environments, procedures and had negotiated access in advance with the nurse-in-charge. The sequence of patient interviews are outlined in Table 12.

The time-table proved to be effective and meant that all the patient interviews were carried out during an eight day period when perceptual knowledge and understandings were fresh in the mind of the individual. The patient interviews ran concurrent with the nurse interviews and perceptual construings.

This process of data collection was intensive and demanding for the investigator. However the demands of the clinical environment and the throughput of patients required that all data were collected in as short a period of time as possible.
### Table 12: Sequence of Patient Interviews in Hospital A

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex</th>
<th>Surgery</th>
<th>Post-op day &amp; Time of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>M</td>
<td>Bronchoscopy</td>
<td>1st at 9.00</td>
</tr>
<tr>
<td>57</td>
<td>F</td>
<td>CABG * 3</td>
<td>3rd at 1.00pm</td>
</tr>
<tr>
<td>71</td>
<td>M</td>
<td>Repair of pharyngeal pouch</td>
<td>3rd at 3.00pm</td>
</tr>
<tr>
<td>30</td>
<td>M</td>
<td>CABG * 3</td>
<td>4th at 4.00pm</td>
</tr>
<tr>
<td>41</td>
<td>F</td>
<td>Right fenestration</td>
<td>5th at 11.00am</td>
</tr>
<tr>
<td>42</td>
<td>M</td>
<td>CABG * 3</td>
<td>3rd at 3.00pm</td>
</tr>
<tr>
<td>46</td>
<td>M</td>
<td>Oesophago-gastrectomy</td>
<td>6th at 2.00pm</td>
</tr>
<tr>
<td>59</td>
<td>M</td>
<td>CABG * 3</td>
<td>3rd at 6.00pm</td>
</tr>
<tr>
<td>66</td>
<td>F</td>
<td>CABG * 3 + MVR</td>
<td>3rd at 7.00pm</td>
</tr>
<tr>
<td>72</td>
<td>M</td>
<td>Oesophago-gastrectomy</td>
<td>8th at 10.00am</td>
</tr>
</tbody>
</table>

**Legend**

CABG* = Coronary artery by-pass graft and number of graftings. MVR = Mitral Valve Replacement.
5.6 Biographical Data

This next section deals with the biographical data obtained from the sample population of nurses who participated in this part of the study. As can be seen from Table 13 the sample of nurses was drawn from four clinical environments. The numbers of first level nurses were fairly evenly distributed across the four workplaces and cover both day and night duty. There were no night nurses per se in the recovery room or the operating theatre, rather the staff in these areas operated an on-call system amongst themselves. As mentioned previously a system of internal rotation operated in the surgical ward and in the intensive care unit.

Table 13: Place of Work by Nurse - Hospital A

<table>
<thead>
<tr>
<th>Place of work</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward</td>
<td>9</td>
<td>33%</td>
</tr>
<tr>
<td>Operating Theatre</td>
<td>7</td>
<td>26%</td>
</tr>
<tr>
<td>Cardiac I.C.U.</td>
<td>6</td>
<td>22%</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Legend I.C.U. = Intensive Care Unit
All nurses who participated in the study were female. Interestingly enough over the previous ten years there had never been a qualified male nurse working in any of the clinical areas included in the study.

The mean age of the nurses in the sample was 29 years. As can be seen from Table 14 the ages of the nurses who were employed in each working area ranged from 21 to 35 years.

**Table 14: Place of Work by Age of Nurse - Hospital A**

<table>
<thead>
<tr>
<th>Place of work</th>
<th>21-24</th>
<th>25-28</th>
<th>29-32</th>
<th>Over32</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
</tr>
<tr>
<td>Ward</td>
<td>1 3.7</td>
<td>6 22.3</td>
<td>1 3.7</td>
<td>1 3.7</td>
<td>9 33</td>
</tr>
<tr>
<td>Cardiac ITU</td>
<td>2 7.4</td>
<td>2 7.4</td>
<td>3 11.1</td>
<td>1 3.7</td>
<td>8 30</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>1 3.7</td>
<td>-</td>
<td>1 3.7</td>
<td>1 3.7</td>
<td>3 11</td>
</tr>
<tr>
<td>Theatre</td>
<td>3 11.1</td>
<td>1 3.7</td>
<td>1 3.7</td>
<td>2 7.4</td>
<td>7 26</td>
</tr>
<tr>
<td>Total</td>
<td>7 26</td>
<td>9 33</td>
<td>6 22</td>
<td>5 19</td>
<td>27 100</td>
</tr>
</tbody>
</table>

More than half (15) of the nurses had been in post for less than a year and when questioned they stated that they were committed to surgical nursing and to cardiothoracic in particular. The majority of these nurses had completed a recent specialist course relevant to cardiothoracic. The following Table 15 shows the length of time in post for all nurses.
Of the 12 nurses who had been in post over a year ten were charge nurses. The other two were staff nurses who had been working part-time for the previous three years and had only recently returned to full-time employment.

Continuing education and professional development was important to all nurses who were interviewed. As can be seen from Table 16 the relevant range of courses completed by these nurses must have helped to improve their knowledge base and develop the skills necessary to care for cardiothoracic patients.
Table 16: Post-Basic Courses Completed - Nurses

Hospital A

N=27

<table>
<thead>
<tr>
<th>Courses</th>
<th>Nurses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive care</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Cardiothoracic</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Theatre</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Management</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Two or more of the above courses</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total</strong></td>
<td><strong>82</strong></td>
</tr>
<tr>
<td></td>
<td><strong>No post-basic courses</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

All of these courses were available locally in the college of nursing and each had been formally recognised and accredited by the National Board for Nursing, Midwifery, and Health Visiting for Scotland. Nurses working in cardiothoracic were released to undertake the courses. Also mentorship and guidance were available in the clinical areas. The large number of sisters/charge nurses who had been appointed provided clinical facilitation and mentorship to less experienced nurses as an integral part of their role.

It was interesting to compare the place of work of the
nurse by the post-basic courses completed to try and identify if any particular area encouraged continuing education and professional development more than another. The data enabled analysis to ascertain whether different levels of education affected the subsequent constrictions. Table 17 indicates the number of nurses in each working area who had completed post-basic courses.

Table 17: Place of Work by Post-Basic Courses Completed

<table>
<thead>
<tr>
<th>PLACE OF WORK</th>
<th>Completed</th>
<th>Not completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical ward</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Cardiac ICU</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Theatre</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>5</td>
</tr>
</tbody>
</table>

As can be seen all surgical ward nurses had completed a post-basic course. As the majority of these nurses were recently qualified and had been in post for less than a year it was decided to compare the length of time in post with post-basic courses completed to see if there was a relationship between post-basic
education, length of time in post and career prospects. From discussions with the nurses all commented that they "had to do a course" for promotion and to work competently in the speciality. This was particularly commented upon by the theatre and intensive care nurses. Table 18 presents the number of post-basic courses completed by the length of time a nurse has been in a particular post.

Table 18: Length of Time in Current Post by Number of Post-Basic Courses Completed - Nurses Hospital A

<table>
<thead>
<tr>
<th>Length of time in current post</th>
<th>1 or more courses</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Under 1 year</td>
<td>11</td>
<td>40.7</td>
<td>4</td>
</tr>
<tr>
<td>1-3 years</td>
<td>5</td>
<td>18.5</td>
<td>1</td>
</tr>
<tr>
<td>4-6 years</td>
<td>2</td>
<td>7.4</td>
<td>0</td>
</tr>
<tr>
<td>Over 6 years</td>
<td>4</td>
<td>14.8</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>81.5</td>
<td>5</td>
</tr>
</tbody>
</table>

As can be seen the nurses who had been in post for more than a year, with the exception of one person, had all completed post-basic courses. Interestingly, however, the majority of the relatively newly appointed nurses had also completed courses. The four nurses who had
not completed courses were all on waiting lists to undertake cardiothoracic, intensive care or theatre courses.

The interest in professional development and post-basic education was most marked amongst these nurses. The initial nurse training undertaken by the nurses was also analysed and as illustrated in Table 19 the majority of nurses had completed the 3 year course for registered general nurses. Only three nurses had undertaken degree courses in nursing.

<table>
<thead>
<tr>
<th>Hospital A</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 year RGN Course</td>
<td>24</td>
<td>89</td>
</tr>
<tr>
<td>Degree course</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

The whole issue of educational experience was to prove interesting when analysing the perceptual grids of the nurses. The full implication of this will be explained later in the chapter.

Apart from formal education being important for nursing, experiential learning and clinical
development, it is argued, are also important and significant factors in the development of patient care. Hence when interviewed and when completing the questionnaire, the nurses were asked to specify their previous clinical experience and also their attendance at study days or conferences in the last three years. Table 20 shows the range of experience of the nurses.

**Table 20: Posts Held since Completing RGN Training - Nurses Hospital A**

<table>
<thead>
<tr>
<th>Posts Held</th>
<th>Nurses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current post only</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>One previous post</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Several previous posts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in cardiothoracic areas</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>A variety of posts in surgical specialities</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As illustrated more than half of the nurses (16) had held several previous posts in surgical specialities. The sampled nurses commented that they preferred surgery to medicine and would not move from working in a surgical speciality. Those who had held several previous posts (in cardiothoracic) commented that the internal rotation system encouraged them to apply for
promoted posts in cardiothoracic. These nurses felt confident and able to care for all patients. The 5 nurses who had held only one post were in their first post since completing their basic nursing education. These five nurses were also the same nurses who had not undertaken any post-basic education. One of them, a theatre nurse, had been in post 14 months and when asked about further education she commented that she "could not face more classrooms just yet".

Table 21 demonstrates the number of conferences or study days attended by the nurses over the last three years.

**Table 21: Number of Conferences and Study-Days Attended during the Previous Three Years - Nurses Hospital A**

<table>
<thead>
<tr>
<th>Conferences/study days attended</th>
<th>Nurses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None in last 3 years</td>
<td>14</td>
<td>52</td>
</tr>
<tr>
<td>1 in last 3 years</td>
<td>10</td>
<td>37</td>
</tr>
<tr>
<td>Several in last 3 years</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As can be seen approximately half the nurses had not attended any study days or conferences. Whilst formal
course-based, structural and certificated education was valued, the other more self-directed and less formal type of professional development evinced by conferences and peers was perceived as equally valuable by the nurses. Access to such conferences was restricted in practice by the limited resources available for staff development. The scope for in-service education was also restricted in this hospital and mentorship for senior nurses at sister level was not available.

Finally, it is of relevance to examine the nurses' satisfaction with staffing levels, their understanding of and satisfaction with care-planning. The data presented here have been taken from the biographical questionnaires and elaborated from the interviews carried out on the subject of care-planning.

At the time of investigation the preliminary work on clinical grading had been carried out. Many nurses were concerned about the implications of grading for clinical practice. It was generally stated by the nurses that there had been and were staff shortages in the clinical environments which had been included in the study. This meant that certain members of staff were fulfilling a more elaborate and demanding role than their job description allowed for. Several nurses commented that the new clinical grading structures
should ensure that those who carried out specific aspects of care would be adequately rewarded.

As can be seen from Table 22 the majority of nurses were not satisfied with existing staffing levels.

**Table 22: Satisfaction with Staffing Levels - Nurses**

<table>
<thead>
<tr>
<th>Hospital A</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Nurses</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>7</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Not satisfied</td>
<td>20</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>27</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

To determine if this dissatisfaction was strongest amongst the less-experienced younger nurses who had recently come into the specialty, a comparison was made between the satisfaction with staffing levels and the age of the nurse. The results of this cross tabulation are presented in Table 23.
Table 23: Satisfaction with Staffing Levels by Age of Nurse - Hospital A

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>21-24</th>
<th>25-28</th>
<th>29-32</th>
<th>Over32</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes satisfied</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>No dissatisfied</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>27 100%</td>
</tr>
</tbody>
</table>

As can be seen approximately half (4) of the nurses in the age bracket 25-28 stated that they were satisfied with staffing levels. Interestingly these nurses were working in the intensive care unit. Where the nurse patient ratio was 2:1 when the intensive care course students were included in the figures. The other two nurses from intensive care who were senior sisters (in the age group over 32) commented that there was a staff shortage because they required time to "care for patients directly, teach 'course nurses', and do the paperwork". Clearly, as the role of the nurse expanded the dissatisfaction with staffing levels became more pronounced.
5.7 Care-Planning

When asked about their satisfaction with care-planning more than half the nurses stated that they were dissatisfied with the process of care-planning currently being practised in Hospital A.

Table 24: Level of Satisfaction with Care-Planning – Nurses Hospital A

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Nurses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>16</td>
<td>59</td>
</tr>
<tr>
<td>Unsure/Undecided</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>27</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As can be seen only three nurses were satisfied with the process of care-planning. These three nurses worked in the intensive care unit and one stated that "the procedures in the unit were well worked out for different types of patients. With the CABG patient we have a set routine. The 'chests' are different though they can be unpredictable".

The use of the derogatory term CABG (pronounced cabbage) in referring to cardiac surgical patients was
widely used by nurses in each clinical setting. No-one commented on the symbolism of this term nor did anyone state that whilst this particular linguistic expression was used his or her thoughts did not correspond. The connections between language, thought and action are interesting phenomena in nursing which require further investigation through research.

These nurses did not mention the individual or personal nature of care and in fact stated that they planned their care around the surgery that was performed. As one nurse stated "we prepare for the patient coming through once we know how many grafts have been done or the extent of the surgery. There are basic things we must do for every patient through here. They will all be monitored and ventilated so the care is the same".

Those who were dissatisfied included the theatre nurses who stated that they would have liked to have been able to visit patients pre-operatively and post-operatively, in order to inform the patient of what to expect in theatre and for staff to learn of their progress post-operatively. The care of the patient in the operating department was routinised and delivered according to the proposed surgery and not according to any special demands of the patient. No record of the care given or the pre-anaesthetic assessment carried
out by the anaesthetic nurse was documented. The theatre nurse only recorded the actual surgery performed. All the theatre nurses commented on how inadequate this practice was, but stated that it was very difficult with the existing system of documentation for them to record what care had been given. The difficulty of prioritising care and of valuing the amount of personal care available to patients in the operating department was evident in discussions with the nurses.

The ward nurses were generally dissatisfied with care planning. This dissatisfaction was expressed in terms of the speed of throughput of patients. As stated previously in this chapter the average length of stay for each patient was 5 days. This short duration, as one nurse explained: "hardly gives any time to get to know the cardiac patients. So we just give the usual routine care that we think the patient needs. We don't consult or ask the patient. We only respond to their demands if they make a fuss. Most of the time we are too busy doing all the tasks that need to be done like looking after drips and drains and recordings. You're lucky if you get your care plan written up every other day. There's so many of them to do. We don't have the time to write them all out so we just write in the progress sheet". Another nurse commented that
"the thoracic patients are quite different, they need a lot of psychological support and we don't have the time to give it. Mr. . . . . (consultant) likes to be honest with these patients and give them the facts but he doesn't have to answer the questions that come up later. The cardiac patients are a lot easier they look after themselves really".

These sentiments were expressed by several of the ward nurses. So it would appear that the patient's type of surgery or diagnosis or prognosis may affect the nurses' construings.

The documentation system in Hospital A consisted of four sections.

1. A biographical form which contained information about the patient's next of kin, social conditions, general practitioner, and details of personal belongings.

2. A patient assessment form was used which was based on Roper, Logan and Tierney's (1980) activities of living. This assessment is completed when the patient was first admitted to the ward and NEVER repeated during any one period of hospitalisation.

3. The care-plan forms showed the record of care required and given. The record of care planned, the assessment carried out and recorded, operated
in conjunction with one another. The details of the evaluation of care were also recorded on this sheet.

4. Finally there was a progress form upon which the nurse recorded daily progress. In practice this sheet was used like the former nursing Kardex system, in that everything was recorded here rather than re-assessing the patient and amending the care-plan.

This process of recording care was problematic for the nurses for they felt that they should be recording information more fully yet many were in a quandary about what to record. The nurses commented on the inadequacies of the assessment form, stating that they found it very difficult to ask patients about expressing sexuality or attitudes to death when they first came into hospital. There seemed to be no consideration given to the idea that these assessments might be carried out at a later date or not at all. One nurse stated that "I don't ask about these things I just ask if they are married, how many children they have and who their next of kin is and then write these answers next to the spaces on the assessment form".

The nurses were not selective in the application of the components of the Model. Nor did any nurse fully
appreciate the range of social, psychological, or cultural factors which contribute to the activities of living. The focus was generally physiological.

When the care-plans of the sample population of patients were consulted somatic or physiological concerns were prominent. When asked if they ever consulted the care plan to know what care to give to a particular patient the general answer from the ward, recovery room and theatre nurses was negative.

The theatre nurses stated that the patient's care-plan did not come down to the operating department. Only the anaesthetic record, consent form, medical notes and x-rays accompanied the patient to theatre. The recovery room nurses stated that they had their "own forms which went back to the ward with the patient" and that they rarely needed to consult the ward based care-plan. As one nurse stated "if we need to know anything special the anaesthetist tells us".

The ward nurses stated that they relied on the verbal report at the beginning of a shift to inform them of the care to be given to particular patients and rarely looked at the care-plans unless they were expected to "write them up". By contrast the intensive care nurses stated that they "regularly consulted the
patient's care plan”. As one sister stated "The care-plan is where I write down the patient's vital signs and other monitoring information".

The care-plans used in the intensive care unit were actually recording graphs and a list of standard nursing interventions to ensure the patient's well-being. These were physically enclosed within the patient's care-plan from the surgical ward, but were not written using the nursing process format of assess, plan, implement and evaluate. The care recorded did not reflect the activities of living. However all the nurses working in the intensive care unit commented on the value of the care-plan as they were accustomed to using it.

When asked what they considered to be the most important aspects of patient care the nurses replies varied. Several commented on the physical aspects of care such as the recording of vital signs and the monitoring specific regimes. The theatre and the recovery room nurses mentioned the safety aspects of patient care whilst in the operating department and the ward nurses commented on bathing, feeding and talking to the patients. As can be seen from Table 25 the majority of nurses (13) stated that the physical and psychological aspects of care were equally important.
### Table 25: Aspects of Nursing Care Considered Important by Nurses in Hospital A

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Number of nurses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Care</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Psychological Care</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>Combination of Physical and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Care</td>
<td>13</td>
<td>48</td>
</tr>
<tr>
<td>No Answer</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

When asked to comment on what was meant by psychological care the nurses stated that this included: informing patients of what would happen to them; recognising fear and anxiety in patients; doing something to relieve these feelings; talking to the patient whenever important issues arose; and spending time getting to know the patient. The two nurses who gave no answer to this question stated that they were "quite new" to cardiothoracic surgery and did not yet know what the important elements of nursing were for these patients. These particular nurses had actually been working in the surgical ward for six months but because they had not completed a cardiothoracic course felt that they were disadvantaged compared with their
colleagues in their knowledge of care-planning.

To conclude this consideration of the data so far, it would appear that certain biographical factors may influence nurses' construings of patients. Foremost amongst these is the educational development of the nurse, the place of work of the nurse and the length of time in post. The patient's diagnosis/type of surgery performed or prognosis may also be influential. In the next section the nurses' construings (using the supplied constructs as represented in Table 26) will be presented, analysed and discussed.
<table>
<thead>
<tr>
<th>No.</th>
<th>CONSTRUCTS</th>
<th>CONTRASTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Very easy to talk to.</td>
<td>Very difficult to talk to.</td>
</tr>
<tr>
<td>3.</td>
<td>Always asking questions.</td>
<td>Never asks questions.</td>
</tr>
<tr>
<td>4.</td>
<td>Feel very worried about.</td>
<td>Do not feel worried about.</td>
</tr>
<tr>
<td>5.</td>
<td>Is making very good progress.</td>
<td>Is making very poor progress.</td>
</tr>
<tr>
<td>7.</td>
<td>Experiences a great deal of pain.</td>
<td>Experiences no pain.</td>
</tr>
<tr>
<td>8.</td>
<td>Was very anxious about their surgery.</td>
<td>Was not anxious about surgery.</td>
</tr>
<tr>
<td>9.</td>
<td>Is very anxious about their recovery.</td>
<td>Not anxious about their recovery.</td>
</tr>
<tr>
<td>10.</td>
<td>Was very demanding of nursing time pre-operatively.</td>
<td>Not demanding of nursing time pre-operatively.</td>
</tr>
<tr>
<td>11.</td>
<td>Needed a lot of information pre-operatively.</td>
<td>Needed no information pre-operatively.</td>
</tr>
<tr>
<td>12.</td>
<td>Has undergone very major surgery.</td>
<td>Has undergone very minor surgery.</td>
</tr>
<tr>
<td>14.</td>
<td>Requires intensive nursing care post-operatively</td>
<td>Requires routine nursing care post-operatively</td>
</tr>
<tr>
<td>17.</td>
<td>Not independent enough.</td>
<td>Too independent.</td>
</tr>
<tr>
<td>18.</td>
<td>Makes me feel happy.</td>
<td>Makes me feel sad.</td>
</tr>
<tr>
<td>20.</td>
<td>Is very comfortable to be with.</td>
<td>Is very uncomfortable to be with.</td>
</tr>
<tr>
<td>21.</td>
<td>Enjoy caring for this patient.</td>
<td>Dislike caring for this patient.</td>
</tr>
<tr>
<td>22.</td>
<td>Feel very sympathetic towards.</td>
<td>Feel very unsympathetic towards.</td>
</tr>
<tr>
<td>23.</td>
<td>Feel I know the patient as a real person.</td>
<td>Do not know patient as a person.</td>
</tr>
<tr>
<td>24.</td>
<td>Very sure of how to care for this patient.</td>
<td>Very unsure of how to care for this person.</td>
</tr>
<tr>
<td>25.</td>
<td>Get a lot of job satisfaction from nursing this patient.</td>
<td>Get no job satisfaction from nursing this patient.</td>
</tr>
</tbody>
</table>
5.8 *Nurses' Construings and Perceptions*

To recapitulate briefly, the perceptual constructs which were supplied to the nurses were obtained from the elicitation stage of the research and then validated by a small sample of nurses working in a cardiothoracic unit. Table 26 contains the perceptual constructs supplied to the nurses for application to each patient.

When shown the individual's name, age and details of the surgery performed each nurse was asked if she knew the patient. They all stated that they knew each patient but some they knew better than others. To test how well a nurse knew a patient, it was decided to analyse the perceptual grids obtained in such a way as to identify which nurses knew which patients and whether there were any interesting differences between nurses in terms of the degree of knowledge about a particular patient.
Table 27: Percentage of Patients Known by Each Nurse – Hospital A

N=27

<table>
<thead>
<tr>
<th>NURSE</th>
<th>% OF PATIENTS KNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>18</td>
<td>63</td>
</tr>
<tr>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>22</td>
<td>96</td>
</tr>
<tr>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>24</td>
<td>96</td>
</tr>
<tr>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Percentage of patients known by all nurses is 98.35
The following data deals with how well the patients in the study were known to each nurse. The term "known" has a precise meaning namely that the nurse had cared for the patient regularly and was able to describe the patient in terms of the constructs provided. If for a specific patient, a nurse stated that she could not apply 5 or more constructs to that patient then for the purposes of this study it was assumed that the nurse did not know the patient.

As can be seen from Table 27, the majority of nurses knew all of the patients. Only three nurses did not know specific patients. Nurses 22 and 24 did not know the patient who had undergone a bronchoscopy very well, as they only met him briefly in the operating department. These two nurses had difficulty applying the constructs related to psychological care and social interaction to this man. But they could use the professional judgement constructs, the health progress and the personal constructs without any difficulty and by drawing on past experiences with other patients who had undergone a bronchoscopy.

Nurse 18 on the other hand did not wish to use the following constructs for any patient:
No.11 "Needed a lot of information pre-operatively". She stated that the process of information giving to
the patient before surgery was the doctor's responsibility not the nurses.

No. 23 "feel I know the patient as a real person". She said that she could not apply this to any patient because she "had no wish to know a patient as a friend".

No. 19 "Is very like my father/mother". This construct could not be used by this particular nurse because as she said "I have a spiritual Father in Christ and my mother is abroad. No-one can be like them and I never think of patients in these terms".

This particular nurse was distinctively different in her use of the other constructs in so far as she repeatedly used the contrast end of the construct statements. She stated that she felt:-

"very depressed about the patients who come to intensive care. I've been here 2 years and things do not get better for the patients. So many of the patients die. They do not change their way of life".

At this point this particular nurse began to proselytise about Christianity and spiritual well-being. The construings made by this nurse represented an interesting finding in that two very
distinctive repertoires of perception were operational at the one time. This point is important to consider since many nurses have several roles operating together at any one time. The necessity to keep these roles separate or in balance is of concern to most nurses, and from the construing data already obtained it would appear that only certain general construings are allowed to enter the professional framework. Interestingly no other nurse in any stage of the study mentioned spiritual well-being of patients as important.

Table 28 shows the percentage of nurses who knew each patient in the sample. This time any patient who had five or more construct scores missing across all the nursing grids was assumed not to be known.

As can be seen, 95.55% of nurses knew all the patients. Patient No 10 was least well known by all nurses. The reasons for this will become apparent in the patient interview section of this chapter.
Table 28: Percentage of Nurses who Knew each Patient in Sample - Hospital A

<table>
<thead>
<tr>
<th>Patient No.</th>
<th>% of Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>96</td>
</tr>
<tr>
<td>2</td>
<td>96</td>
</tr>
<tr>
<td>3</td>
<td>96</td>
</tr>
<tr>
<td>4</td>
<td>96</td>
</tr>
<tr>
<td>5</td>
<td>96</td>
</tr>
<tr>
<td>6</td>
<td>96</td>
</tr>
<tr>
<td>7</td>
<td>96</td>
</tr>
<tr>
<td>8</td>
<td>96</td>
</tr>
<tr>
<td>9</td>
<td>96</td>
</tr>
<tr>
<td>10</td>
<td>89</td>
</tr>
</tbody>
</table>

Percentage of nurses that know all patients is 95.55.

If the place of work of the nurse is taken into consideration then it can be shown that there is a slight difference in the percentage of patients known by nurses. Table 29 illustrates these differences.
Table 29: Percentage of Patients Known by Nurses by Specific Workplace - Hospital A

N=27

<table>
<thead>
<tr>
<th>WORKPLACE</th>
<th>% OF PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical ward</td>
<td>100</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>100</td>
</tr>
<tr>
<td>Operating Theatre</td>
<td>100</td>
</tr>
<tr>
<td>Cardiac Intensive Care Unit</td>
<td>96</td>
</tr>
</tbody>
</table>

This indicates that the nurses in the surgical ward, the recovery room and the theatre knew all the patients. This was demonstrated in so far as they could apply the constructs supplied, recognise the patient's name, actively recall caring for the patient, contribute to the care records and evaluate the patient's progress. The intensive care nurses knew the patients slightly less (as explained above).

One theatre nurse commented that she did not know the emergency by-pass patient thoroughly as she stated "I just came on duty when he arrived in the anaesthetic room and I had to go and quickly scrub for the case". In practice this meant that the nurse did not have the opportunity to to meet the patient pre-operatively.
In order to analyse the construing grids and answer the research questions presented earlier it was decided to identify the variance between grids. An analysis of variance was carried out in order to identify the particular variables which were significant in influencing the construing process. As each construct statement was applied to each patient by the majority of nurses, and a score of 1-4 given, the repertory grids obtained were analysed statistically.

Initially the separate quantities of the nurses' data were analysed independently and ranked according to the Mean Squared value (MS value). This value indicates how much of the variation in the scores can be explained by a specific variable. The separate quantities refer to the information obtained from the biographical questionnaire and the actual scores on the grids. So for example the variable satisfaction/dissatisfaction with care plans was cross tabulated with the scores on the grids in order to obtained a measure of variance. This measure was the MS value. Using this technique each variable from the biographical questionnaire was analysed in order to obtain an MS value for each.

Table 30 presents the full details of this stage of the analysis and shows the ranked order of the MS values.
and significance of each variable at this stage of the statistical analysis.

As can be seen from Table 30 the significant independent variables include: use of care plans; the place of work of the nurse; the number of study days and/or conferences attended in last three years; the nurse's satisfaction with staffing levels; the individual nurse; the age of nurse; the RGN course completed by the nurse and the number of previous nursing posts. Each of these variables effected the application of the constructs to the particular sample group of patients.
<table>
<thead>
<tr>
<th>Nurse Variable</th>
<th>Sum Squares</th>
<th>Cases</th>
<th>MS value</th>
<th>F Score</th>
<th>Significance</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPUSE</td>
<td>79.04</td>
<td>2</td>
<td>31.52</td>
<td>32.78</td>
<td>0.0000</td>
<td>1</td>
</tr>
<tr>
<td>WARD</td>
<td>25.56</td>
<td>5</td>
<td>25.11</td>
<td>20.94</td>
<td>0.0000</td>
<td>2</td>
</tr>
<tr>
<td>CONF</td>
<td>62.66</td>
<td>4</td>
<td>15.67</td>
<td>12.96</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td>STAFF</td>
<td>28.59</td>
<td>2</td>
<td>14.29</td>
<td>11.78</td>
<td>0.0000</td>
<td>4</td>
</tr>
<tr>
<td>NURSE</td>
<td>376.04</td>
<td>27</td>
<td>13.93</td>
<td>11.94</td>
<td>0.0000</td>
<td>5</td>
</tr>
<tr>
<td>NAGE</td>
<td>54.73</td>
<td>4</td>
<td>13.68</td>
<td>11.31</td>
<td>0.0000</td>
<td>6</td>
</tr>
<tr>
<td>QUAL</td>
<td>31.92</td>
<td>3</td>
<td>10.64</td>
<td>8.77</td>
<td>0.0000</td>
<td>7</td>
</tr>
<tr>
<td>POST</td>
<td>41.54</td>
<td>4</td>
<td>10.39</td>
<td>8.57</td>
<td>0.0000</td>
<td>8</td>
</tr>
<tr>
<td>SERV</td>
<td>20.53</td>
<td>4</td>
<td>5.13</td>
<td>4.22</td>
<td>0.0016</td>
<td>9</td>
</tr>
<tr>
<td>SATCP</td>
<td>13.57</td>
<td>3</td>
<td>4.52</td>
<td>3.27</td>
<td>0.0100</td>
<td>10</td>
</tr>
<tr>
<td>ANS</td>
<td>8.42</td>
<td>2</td>
<td>4.21</td>
<td>3.46</td>
<td>0.0307</td>
<td>11</td>
</tr>
<tr>
<td>IMPEL</td>
<td>10.54</td>
<td>4</td>
<td>2.63</td>
<td>2.17</td>
<td>0.0704</td>
<td>12</td>
</tr>
<tr>
<td>COUR</td>
<td>6.23</td>
<td>6</td>
<td>1.04</td>
<td>0.85</td>
<td>0.5284</td>
<td>13</td>
</tr>
<tr>
<td>GRADE</td>
<td>0.20</td>
<td>2</td>
<td>.10</td>
<td>.08</td>
<td>0.9231</td>
<td>14</td>
</tr>
<tr>
<td>HOSP</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSEX</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend

Cpuse = Do you use care-plans.
Ward = Place of work.
Conf = Study days conferences attended in last three years.
Staff = Satisfaction/dissatisfaction with staffing levels.
Nurse = Individual nurse.
Nage = Age of nurse.
Qual = RGN course completed.
Post = Number of previous nursing posts held.
Serv = Length of time in present post.
Satcp = Satisfaction/dissatisfaction with care-planning.
An = Have post-basic courses been completed.
Impel = Important aspects of patient care.
COUR = Specific post-basic courses completed.
Grade = Grade of nurse.
Hosp = Hospital A
NSEX = Sex of nurse.
It was then decided to carry out a regression analysis in order to identify which variables had the greatest effect on the repertory grid scores. The three highest ranked variables were analysed first (use of care plans; place of work; conferences/study days attended) to see if their significance could be accounted for by the other variables. Initially the rank determined the priority for regression analysis. For example the variable coded CPUSE (Use of care plans) was ranked 1.

The use of care plans variable (CPUSE) had the largest MS value and therefore accounted for the largest part of the variance in the scores. The place of work (WARD) was significant. However the study days/conferences attended (CONF) with a significance value of 0.0047 was 'slightly' significant at the 5% level as shown in Appendix 8, but the effect of this variable was fairly minor as shown in Appendix 9 when the analysis was carried out without the study day/conferences attended variable (CONF).

When CONF was added to the model as shown in Appendix 10 the picture changed yet again. The place of work (WARD) was still significant but the use of care plans (CPUSE) with a significance level of 0.2805 was now insignificant. The significance of the variable, use of care plans (CPUSE), could now be explained by the
satisfaction with staffing levels (STAFF) variable. The study days/conferences attended (CONF) was still significant but with an MS value of 4.87 the effect of CONF was fairly unimportant compared to that of the place of work (WARD) in explaining the variation in scores on the repertory grids (Appendix 11).

Discarding the least important variables, the place of work (WARD) and the study days/conferences attended (CONF) were analysed with the next two highest ranked variables namely the RGN course completed (QUAL) and the age of the nurse (NAGE). The results of the analysis revealed the significance of the place of work and the RGN course completed and also the slight significance of the variable CONF. The age of the nurse was not significant and could be explained by other variables as shown in Appendix 12.

Replacing the nurses' age variable (NAGE) with the number of previous posts held (POST), the next highest ranked variable, the analysis as shown in Appendix 13 indicated that all four variables were significant and in any order of priority they all remained so. The place of work (WARD) and the RGN course completed (QUAL) were the most significant and although the number of previous posts held by the nurse (POST) and the study days/conferences attended (CONF) were
significant their MS values did not account for as much of the variation in the scores as did the variables WARD and QUAL.

Continuing in the same way, adding variables to the model to test their significance, length of time in post (SBRV) was found to be significant but less so than the other remaining variables. The variable entitled satisfaction with care-planning (SATCP) was found to be insignificant so it was ignored and in the following analysis the important aspects of patient care (IMPEL) was found to be unimportant also.

Analysing the effect of the variable on post-basic courses completed (COUR) to the model accounted for the significance of the variable on study days/conferences attended (CONF). COUR (post-basic courses attended) was itself found to be unimportant. CONF lost its significance at the 5% level as shown in Appendix 14. In a similar manner adding variables to the model the grade of the nurse (GRADE) was found to be of no real importance.

The final statistical conclusion reached for the nurses' variables was that the significant variables were:-

WARD: The place of work of the nurse. That is whether the nurse worked in the surgical ward, the operating
theatre, the recovery room, or the intensive care unit.

QUAL: The RGN course completed. That is whether the nurse had completed the 3 year RGN course or a degree course with RGN in nursing.

POST: Other posts held since completing an RGN training. That is whether the current post was the nurse's first post; whether she had held one other post; whether she had held several other posts in cardiothoracic or whether she had held several surgical posts.

If the mean scores for all constructs and all patients for the nurses working in particular clinical environments are examined then it can be seen that the theatre nurses and the recovery room nurses were very similar in their construings. The surgical ward nurses tended to use the contrast end of the construing statement more frequently than the other nurses and the intensive care nurses tended to use the construct pole of the construing statement. For example the surgical ward nurses were more likely to perceive patients as being difficult to talk to, complaining patients, self-caring, and not anxious. Whereas the intensive care nurses tended to perceive the patients as easy to talk to, appreciative patients, very dependent on
nurses, and anxious.

When the mean scores of all constructs by the number of previous posts are compared then the results show that the nurses who have held several cardiothoracic posts tended to apply the construct pole of the social interaction, professional judgement and psychological care constructs more frequently than the other nurses. For example they tended to perceive patients as easy to talk to, making good progress at this stage of their recovery, and anxious. These nurses also tended to use the contrast pole of the personal and health progress constructs more frequently. That is they tended to be reserved about their own feelings and were pessimistic in their perceptions of the patients' prognoses and health progress.

Finally if the mean scores of all constructs by the RGN qualification obtained by the nurse are compared, then the three graduate nurses were markedly different in their application of the social interaction and personal constructs compared with the other nurses. The graduate nurses were more willing to disclose personal feelings and were more aware of the implications of social interaction with patients. The full nursing implications of these findings in terms of what they mean for patient care, professional
development and the analysis of nursing will be discussed fully later.

As with the nurses' variables the specific variables relating to the patients were analysed separately and ranked before being analysed together. The specific variables which were considered against scores on the repertory grids were:

**ADMIS**: The admission status of the patient that is whether the patient was an elective or an emergency admission.

**SURG**: The type of surgery performed on the patient. This was classified into major cardiac; major thoracic; minor thoracic and diagnostic investigations.

**PSEX**: The sex of the patient.

**PAGE**: The age of the patient. The age groupings used were: under 30; 30-40 years; 41-50 years; 51-60 years; 61-70 years; over 70 years.

Table 31 shows the rank order and significance of the particular patient variables on the nurses' construings. As can be seen from Table 31 the type of surgery performed and the age of the patient were the most significant independent variables at this stage of
the analysis.

**Table 31: Rank Order and Significance of Patient Variables on Nurses' Constructions - Hospital A.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Squares</th>
<th>Cases</th>
<th>MS Value</th>
<th>F Value</th>
<th>Signif</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURG</td>
<td>127.70</td>
<td>4</td>
<td>31.92</td>
<td>26.30</td>
<td>0.0000</td>
<td>1</td>
</tr>
<tr>
<td>PAGE</td>
<td>32.92</td>
<td>5</td>
<td>6.58</td>
<td>5.43</td>
<td>0.0000</td>
<td>2</td>
</tr>
<tr>
<td>PSEX</td>
<td>8.38</td>
<td>2</td>
<td>4.19</td>
<td>3.44</td>
<td>0.0313</td>
<td>3</td>
</tr>
<tr>
<td>ADMIS</td>
<td>7.88</td>
<td>3</td>
<td>2.63</td>
<td>2.16</td>
<td>0.0903</td>
<td>4</td>
</tr>
</tbody>
</table>

**Legend**

SURG = Type of surgery performed.

PAGE = Age of patient.

PSEX = Sex of patient.

ADMIS = Admission type.

By fitting the variables according to rank, the age and sex of the patient were found to be unimportant and admission status (ADMIS) was slightly significant at the 5% level with a significance value of 0.0279. But the variable type of surgery (SURG) had the largest effect. By changing the priority of variables the significance levels vary. Every combination suggested that Age, Sex, and Admission status were slightly significant and that the type of Surgery performed was
highly significant.

As the final model had been formed by testing so many variables the only really important ones were those with significance levels rounding to zero (to four decimal points) therefore the type of surgery (SURG) undergone by the patient was the most significant variable in influencing the construings of the nurses (Appendix 15).

When an analysis was carried out on the three variables: the place of work (WARD), the type of RGN course completed (QUAL), the number of previous posts (POST) held by the nurse, with the type of surgery performed (SURG) (as shown in appendix 16) - it was apparent that the type of surgery performed on the patient (SURG) explained the largest part of the variation in the scores.

The last stage of the statistical analysis involved fitting the construct-types into the model. Instead of fitting the 25 individual constructs into the model the constructs were split into their five categories and those in each category treated as replicates, that is as if they were all the same. There were therefore five construct sets in the final analysis. These construct sets were the categories identified
previously namely:- social interaction constructs; professional judgement constructs; psychological care constructs; personal constructs; and health progress constructs. It was clear from the analysis that the largest single effect on the residual came or was derived from the constructs. This was to be expected as the five categories of constructs were set up to be independent of one another.

To test and see if some effect of the nurses had not been accounted for in the variables; place of work (WARD); RGN course completed (QUAL); and previous posts held (POST); the individual nurses (NURSE) variable was added to the model. The inference made from the analysis was that the NURSE variable was not significant. Therefore it could be assumed that the effect of the nurses on the variance of the scores was fully accounted for by; the place of work (WARD); the RGN course completed (QUAL); the number of previous posts held (POST).

In the same manner as above the individual patient variables were added to the model. The MS value for the patients was very low (1.88) and with a significance value of 0.0441 (approaching the 5% level) it was assumed that the effect of the patients had been fully accounted for by type of surgery performed.
5.9 **Concluding Comments**

Thus it can be concluded that; the working context, the type of RGN training completed; the number of previous posts held by the nurse; and the type of surgery performed on the patient, are all highly significant in affecting and influencing nurses' perceptions of patients.

The full implications of these findings will be discussed in the next chapter which will present and analyse the more qualitative data obtained.
Nurses' Perceptions of Patients in an Established Cardiothoracic Unit: Qualitative Data Analyses.
6.0 **Introduction**

In this chapter the qualitative data obtained from interviews with the sample population of patients from Hospital A will be presented and analysed. In Chapter 5, it was shown that certain variables or factors were significant as to the way in which the nurses construed and perceived the sample population of patients included in this stage of the study. It is now proposed to develop these construings and perceptions of patients. Firstly presenting the data obtained from patient interviews, and then discussing these findings in relation to the nurses' construings and patterns of care.

The chapter is organised into the following sections:-
- Patient interviews: general comments.
- Patient interviews: specific cases.
- Discussion and implications of findings by individual constructs and construct sets.

To recapitulate briefly, Hospital A is a large teaching hospital in the Central Belt. The patients referred to the hospital at the time of the study came from all parts of Scotland. However those selected to participate were from the Central Belt only.
6.1 Patient Interviews: General Comments

All patients were invited to participate and given the option to withdraw or stop the interview at any time. Each patient proceeded with the full interview which lasted between 30 and 60 minutes. The variation in timings was due to how much information the patients wished to disclose.

As can be seen from Appendix 1 the interview schedule was designed in such a way as to allow either monosyllabic answers or more in-depth replies. Where appropriate, the investigator utilised counselling skills to enable each patient to express him or herself fully. As a non-directive approach was used the interviewer did not press the patient to explore all the issues.

Professional nursing discretion was exercised and an assessment of the patient's health status was carried out prior to commencing the interview. This was done through consultation with the nursing staff and by means of a general conversation and exploration of well-being and feeling-states with the individual patient. As the author is an experienced nurse in this particular field, she was able to assess the patient's well-being and to decide how in-depth and detailed to make the interview. This discretion was particularly important when conducting research with real patients who were ill and
The data obtained proved to be very enlightening but the process of gathering such information presented the researcher with some problems. Frequently (in 9 out of 10 interviews) particular inadequacies of care were exposed, as the patient disclosed his or her needs and concerns to the researcher. This is not unusual when conducting research according to the humanist tradition, but it can cause ethical and moral dilemmas for the researcher. However as explained previously the ability to clarify any questions AFTER the interview was not a major problem.

Before beginning the interview the researcher arranged with the nurse in charge of the ward to be available for patient support and counselling. Initially the reaction to the request for counselling and support was seen as unnecessary by the nursing staff and the researcher was told that the patient had already been given particular information. The need for reinforcement or the careful planning and staging of information-giving did not occur to the nurses. Fortunately no animosity was expressed towards the researcher for increasing the workload of the nurse-in-charge or for what may have been perceived as levelling criticism at existing practices. This could be attributed in part to the researcher's credibility as
a clinical nurse in the field of cardiothoracic surgery. This is an important point for the present author and other nurses and researchers, who are interested in carrying out clinical research.

In consideration of the patient-interview data two data-sets will be presented. The first part deals with the quantifiable general comments made by the ten patients who were interviewed. The second part focuses, in detail, on five case studies. These case studies have been chosen because these particular patients disclosed a wealth of information about their understandings and experiences whilst in hospital. Together and separately both data-sets illustrate the discrepancies between the nurses' perceptions and the patients' understanding.

At the time of interview, each patient was being cared for in the same surgical ward and all were in the post-operative stage of recovery. Nine of the patients interviewed stated that they preferred to be called by their first names whilst in hospital yet the nursing staff referred to them by their surname. When questioned about the names of nursing staff on the ward, six stated that they did not know the name of any nurse. One patient knew most of the nursing staff as she had been "in and out of here for the last six weeks". The
remaining three stated that they knew the name of one
nurse; this was the one who had admitted them to the
ward.

All patients commented on the confusion over when they
would next see particular nurses. Two patients also
mentioned that there seemed to be many nurses working on
the ward. As one patient said "everytime I need a nurse
someone different comes along". The variety and range
of nurses caring for any one patient seemed to concern
patients. They felt that there were too many nurses and
consequently a lack of continuity. Another patient
stated that she was "fed-up having to explain all over
again to another different nurse". There did not appear
to be any communication from the nurse to the patient as
to who would be caring for him or her at any one time.
This left the patients feeling confused and the nursing
staff dissatisfied with the job as each nurse was given
specific tasks to carry out for all patients, rather than
the total care of particular patients. Patient
allocation and individualised care were not part of the
nursing system of this ward.

The patients who were elective admissions for planned
surgery (9) all described the same routine on admission.
This involved waiting in the dayroom for up to 2 hours
for a bed to become vacant and then being interviewed
first by a doctor and then by a nurse. Each patient commented that the same range of questions was asked by both parties. They wondered why there was the need to repeat the same information to different people. One patient who was admitted as an emergency commented that when he was being admitted "everybody was queuing up to see me and taking samples from everywhere". Clearly there are routines for elective admissions, but these are abandoned in emergency situations where the co-ordination of professional judgement and practice is paramount. The same rigour and co-ordination is not seen to apply in elective admissions.

General information about the ward and what to expect was provided for 8 out of the 10 cases by other patients or by personal inference and exploration. The informal patient network, as in the elicitation and validation stages of the research, and as expertly explained and analysed by Roth (1963a) was very dominant and important to these ten patients. Only one patient referred to the information booklet which was distributed prior to admission. This contained information about the particular ward and the hospital in general. One other patient knew the procedures because she had been in the same ward on several occasions previously.

When patients wanted assistance or care they generally
told whichever nurse was available at the time. This was especially true when the patient was experiencing pain, nausea and/or sleeplessness. In all cases the pain and nausea experiences were dealt with adequately by medication. However each patient stated that nothing was done to help him or her sleep better. The inability to sleep caused four patients some distress. They explained that they were exhausted and stated that they needed something to help them sleep. All patients commented on the noises during the night which frequently woke them, and the fact that no-one explained what these were. One patient stated that she would be "glad to get home and have a decent night's sleep". Whilst interviewing the night nurses, the ward was quite noisy with no care taken to minimise disturbances. The night nurses were unaware of the noises (delivery of stores, telephone, emergency admissions and visits from senior nurses and medical staff) which continued until 2.00am.

For eight of the patients information about the recovery process was obtained at the out-patient department, from the consultant, or from the general practitioner prior to surgery. Two patients commented that the physiotherapist and the cardiac nurse were the people who provided information. As the researcher had made the patients aware and conscious of the recovery process and the stages of progress for the individual, this area of
questioning proved to be disquieting for all patients. The discrepancies between perceived understandings and the reality of recovery were unnerving for patients. One patient commented that he would be back at work next week. This was following a coronary artery by-pass graft three days previously. This understanding clearly was misplaced as recovery from such a major operation alone would take several months, let alone the lifestyle modifications required if he was to maintain health. Another three patients stated that they did not know what to expect when they went home and felt dissatisfied about this aspect of care. From the nurses’ construings very few patients were perceived as requiring information about their hospital recovery or the normal stages of progress to expect once discharged into the community.

The patients generally felt that they had been given enough information about their actual illness and half of the patients said that they had been given too much information. Technical details and medical language had been used to explain the nature of the illness to the patient by the doctor. The nurses and the physiotherapists often supplemented the information and made it easier to understand. Certain themes were repeated to the cardiac patients until they felt guilty and angry at being told to change their lifestyles.
The planning of information-giving was not considered by the nurses or other health care professionals. As a result the information, which was passed on, was repeated frequently to the point of irritation and was seen by patients not to be in their "best interests". It may have been the intention of the health professionals to inform patients in their "best interests" but unfortunately the planning and timing of this health promotion information was not considered nor planned systematically.

All patients stated that they had not been given sufficient information about the recovery process or the timespan for progress to be made and therefore did not know what to expect. The nurses stated that they rarely provided a time framework for patients "because everybody was different". Consequently certain topics were never discussed and patients were left to infer their progress from other patients in the ward. To invite comparisons or to recognise the commonalties in the recovery process was something that nurses did when construing patients and discussed amongst themselves but they did not divulge any of these professional judgements to patients. For example during the construing interviews the nurses frequently compared two or more of the cardiac patients in terms of recovery and progress. Comments such as "He's at that stage when he thinks he can do anything and
gets exhausted, whereas Mr.... is past that he's now scared to do things for himself", were frequently made by the nurses.

When asked if there was a special nurse who cared for them, seven of patients commented that there was "someone special". Interestingly in each of these cases the special person turned out to be either an auxiliary nurse or a student nurse. The remaining 3 patients stated that all the nurses were the same and that it would be "unfair to differentiate them".

When asked what made a nurse "special", the replies followed a similar pattern. The age of the person was important, that is to say someone older, also that the person was firm and directive with the patient. Of the seven patients who stated that there was a special person two of these commented that the night staff were particularly good and "got you what you wanted". These patients, despite being unable to sleep, were not concerned that the night nurses did not administer a sedative but rather that the night staff obtained "treats" for them. When asked what the night staff obtained for them the two patients concerned referred to cups of tea and special food.

The range of questions asked of the researcher at the end
of the interview are worth commenting on. In three cases, these focused on the recovery process of the individual patient, another two patients wanted to know about chemotherapy and radiotherapy and the remaining five patients wanted to know about the researcher as a person e.g. place of birth, current employment, and choice of nursing as a career. This last question was always followed up by the statement "I couldn't do it". The importance of personal disclosures in establishing a rapport with patients and in building up trust in a relationship is necessary. Furthermore the patients were at pains to inform the author of their admiration for nurses and the special skills and knowledge they required.

Implicit in the interviews was a generally high level of satisfaction and admiration of nursing care and nurses. As a critical analysis was carried out on particular case interviews then a different picture began to emerge. From the original ten interviews, five case studies were made. The next section presents these using original material throughout with direct quotes from the people concerned. Where appropriate the local dialect and vernacular has been retained as these statements would lose their strength of meaning in translation into standard English.
The first case study is based on the information obtained from a thirty year old man who was admitted as an emergency patient (patient number 5, Table 12 Chapter 5). He was employed as a bus-driver and had first experienced chest-pain whilst at work. On admission to Hospital A it was discovered that one of his coronary arteries was completely occluded and subsequently he had three coronary artery graftings performed as an emergency procedure.

From an analysis of the nurses' construings about this patient, it appeared that he was perceived unfavourably by all nurses as a patient who:-

- was quite difficult to talk to;
- complained about his care;
- was fairly self-caring;
- experienced very little pain;
- did not have a very good future life;
- probably has a fatal disease as he will not change his lifestyle;
- was quite uncomfortable to be with;
- was not known as a real person by the majority of the nurses;
- was fairly independent;
- was always asking questions;
- was making fairly good progress;
- required some information pre-operatively;
- was not anxious about his recovery;
- was not anxious about his surgery;
- required intensive nursing care post-operatively;
- made the majority of the nurses
feel sad (due to his age and severity of coronary artery disease), yet they were not very sympathetic towards him (due to his interpersonal style). The nurses further stated that they did not enjoy caring for him very much and only obtained some job satisfaction from looking after him.

From the patient interview several contradictions and corroborations emerged. When he was first admitted he commented on everyone coming at him at once and wanting to take samples of blood. He stated that the doctors told him what to expect next but "You think you know because folk tell you things but I didn't really know what was going on". As an emergency admission he was totally confused by events, yet was expected to behave like a rational adult. He explained that the pain in his chest was excruciating and that "Nobody did anything about it. They just kept asking questions and taking samples. I was so scared". The nurses' perceptions that he was not anxious about his surgery was quite different from the patient's feeling-state about it.

He also stated that he was a "bit of a swine at first but they (the doctors and nurses) must be used to it as nobody's been off". This meant that despite his swearing vehemently at the doctors and nurses no-one had ostracised him. He also commented that he could not
clearly remember where he had been, he felt confused and was always asking for clarification. These disclosures about himself fit with the nurses' perceptions about him being a complaining patient and uncomfortable to be with.

The nursing staff also perceived him as being unconcerned about the severity of his illness and his recovery. During the interview he disclosed that when the doctors were last around his bed one of them "Asked me what I was going to do about my weight and smoking. I was just tongue-tied. I couldn't say anything. These people lose you with intelligence. You feel daft to say anything".

That encounter obviously made him feel angry and inadequate that he could not enter into the conversation fully without feeling stupid. He went on to say that he rarely felt included in the conversations and that he resorted to swearing. He was not very proud of this and stated that: "I know what happened to me. I'll need to give up smoking, lose weight. I don't know about my job - I'm a bus driver - I'll need to see about that. The doctor from my work visted me and said to take one thing at a time and not to worry about the job. My wife will need to take time off work to look after me. I hope we can manage".
Clearly he was very anxious about his recovery and what the surgery would mean for his future. The nurses perceived him as difficult to talk to. He evidently also found them difficult to talk to. This may have due to the feelings of guilt engendered by the nurses’ conversations with him which tended to focus on how he should change his way of life. It appears that no nurse understood the difficulties from his perspective hence they felt sad as they perceived him as incapable of change.

This particular patient felt that the total change of lifestyle was easier said than done and that the hospital staff "didn't know what it would be like. The doctors told me I was making good progress but I'll need to change my habits. You think you understand but you don't at all. They [doctors and nurses] were saying that my main problem just now is this phlegm and mucus I need to cough up. Sometimes you think they're speaking to you but they don't really. They think they know the answers but I'm going home tomorrow".

This particular patient was distressed and confused about what had happened to him and had difficulty sorting out short term health goals and long-term ones. He was concerned about going home and felt that he would have difficulties. He had spoken with other patients who had
given him some advice. "One was a long-distance lorry driver. He had his licence returned after a year. I hope we can manage for a year".

When asked if there was someone special amongst the nursing staff for him on the ward he replied:— "Yes. That one over there. [Pointing to a mature student nurse.] She tells me things I understand and talks to the wife". This particular student had recently started working in the ward and amongst other things she was always allocated to bed-making and recording of vital signs. She used this time to get to know the patients fairly well and had developed a good rapport with several patients.

This patient was verbally quite aggressive and robust throughout the interview and may have been difficult to care for. It is hard to care for someone who insults and swears at you regularly. Social mores normally discourage this sort of behaviour. For this particular patient, however, as with many other men, such behaviour between peers is not unusual. What is more unusual is the extension of this towards women. The typical gender reaction in such a situation would be to ignore and or despise the male behaviour. Hence the female nurse reaction of ignoring and being unsympathetic towards this particular man.
b. **The Tearful Lady**

The second case study is based on information obtained from an interview with a 57 year old lady who had undergone a coronary artery by-pass graft three days previously (patient number 2, Table 12, Chapter 5). She had a long medical history of angina pectoralis and had difficulty walking a few yards.

If the nurses' construings of this patient are examined then it can be seen that she was construed in the following terms:

- easy to talk to; appreciative of nursing care; never asked questions; was making good progress; experienced little pain; had a fairly good future life; had a curable disease; was not demanding of nursing time pre-operatively; was quite independent and self-caring; was not anxious about her surgery and was not anxious about her recovery; was very comfortable to be with; was not known as a real person by the nurses; made the nurses feel fairly happy and sympathetic towards her. The nurses also stated that they felt very sure of how to care for this lady and got quite a lot of job satisfaction from looking after her.

This patient felt that she had been well prepared for surgery by the consultant surgeon. This fitted with the
nurses perceptions that she did not require much information pre-operatively and was not demanding of nursing time pre-operatively. She said that the doctor had asked her how she was feeling when he last visited. "He said that I'd be ready to go home the day after tomorrow. Then he asked the other doctor about my X-rays. He didn't tell me about them. My tests were no really explained to me. The doctors spoke about them to each other in the morning. I heard them say everything's in place ".

This lady did not expect her surgery to affect her when she went home but she did state that "I'll need a lot of care, really, I'll want someone there with me". She commented on the fact that the nurses always came when she used her buzzer but "they don't often pop in". This lady was in a single room and found it a bit lonely sometimes. During her time in hospital she had built up a special relationship with an auxiliary nurse. When I asked her what made this nurse special she stated "She is a middle-aged woman I feel I can talk too. She takes no nonsense mind you!"

She stated that the consultant had given her information before her operation and also her general practitioner. When asked what she understood from this information she
stated "It's no such a rare operation nowadays. A certain percentage are very successful and everything should be back to normal for me".

After this statement the patient began to cry and said that she was feeling "a bit bubbly". After telling the author about her stay in hospital and her operation she had just realised all that she had gone through. "The nurses were quite good to me but I'm worried about going home so soon (5 days after surgery). My daughter might be able to look after me. She lives 8 doors away. I don't know why I'm crying but I'm glad your here."

She further stated that: "I don't like to make a fuss. The nurses are so busy. But I don't know how I'll manage at home. I always like to put on a cheery face".

These disclosures helped to illustrate why this patient was comfortable to be with, uncomplaining and easy to talk to, namely she made little or no demand of the nurses. Arising from this interview it would appear that she was repressing her anxieties and concerns.

During her stay no-one had asked this lady about managing at home and since she was recently widowed she was frightened of her own coping abilities and did not want to rely too heavily upon her daughter. Her social 'niceness' and wish to please the nursing staff and not
make demands meant that she was perceived as a good patient by the nurses.

c.  **The School-Teacher**
The third case study is based on information obtained from an interview with a 41 year old female school teacher who had undergone a previous pneumonectomy. Since that surgery she had been readmitted to the surgical ward on three occasions with empyema (patient number 6, Table 12, Chapter 5).

From the nurses' construings this patient was perceived as following:-
making very poor progress; had a poor prognosis; had a fatal disease; was quite easy to talk to; asked questions; was self-caring; was not demanding of nursing time pre-operatively; was very anxious about her recovery; was quite anxious about her surgery; made the nurses feel very sad; was fairly comfortable to be with; made the nurses feel very sympathetic; required routine nursing care post-operatively; was very independent.

The nurses further stated that they obtained little job satisfaction from caring for this patient.

This lady was very articulate about her hospital experiences. She was also very familiar with hospital routines and procedures and stated that "I'm very keen
to communicate with people. The only reason patients don't get information in hospital is because they are in awe of doctors. I always ask when I want information".

This patient found the information booklet provided by the hospital to be a good source of information about various aspects of care and stated that:-

"For some things you'd wait a long time. But you'd have to be a recluse in hospital not to know where things are. Some patient always tells you". This lady explained the patient informal network in some detail and mentioned the patient comparisons that are made and the time frameworks for recovery which are discussed. She then stated that:

"I sometimes feel angry with the heart patients who are up and about and home 6 days after surgery yet all I have is an abscess and I've been in and out for the last six weeks. I lose my patience with heart patients who are always complaining about how bad they feel yet they are up and walking around. I told them that they are well off. If this was years ago they'd be bed-ridden for months".

The animosity that this lady felt towards the cardiac patients was not expressed by any other patient. But interestingly, she may have been expressing one of the reasons behind the differences in construing of cardiac and thoracic patients by the nurses; namely, that the
cardiac patients are in for a short time and appear to be fully back to normal quickly and therefore perceived as self-caring compared with the thoracic patients.

When questioned about her relationship with the nursing staff she said "All nurses are very kind and friendly. They all know their job, they are not wee girls who know nothing". She continued to say that she could usually find someone to help her or answer her questions.

"I'm mobile so I just go and ask. Sometimes the doctors include me in their conversation. The last time they were round nobody said anything to me".

She said that she didn't expect her illness to affect her "in a fatal way but I don't think I'll have the energy to work full-time. The doctor told me it would take a long-time to heal and the nurse told me that the district nurse would come in and change my dressing. They say I'm making good but slow progress and they hope to get to the bottom of all these abscesses soon. I'm not so sure. The chest is draining well but I don't know about this blood". These disclosures fit with the nurses' perceptions that she was very anxious about her recovery. The patient's concern about the fatality of her condition and her rate of progress is similar to the nurses yet neither had discussed it with one another.
She felt that she had been given sufficient information about her recovery and progress. "They tell me on the doctors ward round then I ask the nurse to clear up what was said. The only problem is the nausea. I don't care to take anything. The nausea stops in half-an-hour. I didn't tell anyone about it, they just heard me retching one time. Stemetil lasts 3-6 hours and I'm too sleepy with it. Doctor said I should have tea in bed in the morning. The only thing I need help with is when the dressing on my wound comes loose and I ask for micro-pore." These disclosures again corresponded to the nurses perceptions that she was independent and self-caring.

When asked if there was a special nurse for her she stated: "All the nurses are helpful. Although the night-staff will get curries and Chinese take-aways for you. The food is terrible in here".

The interview concluded with her stating that she was glad that her son could come in and see her. Though he wanted her home and couldn't understand why she was not there. She then said "I think this really is the best hospital. The nurses like when my wee boy comes in. They spoil him." Some of the nurses' sympathy towards this lady may be explained by her family. Also the fact that several nurses stated that they felt they knew
her as a real person which may be due to this and the fact that she had been hospitalised on several occasions.

d. The Church Elder

The fourth case study is based on the information obtained from an interview with 71 year old retired man who had undergone surgery to repair a pharyngeal pouch (patient number 10, Table 12, Chapter 5). He had a long history of ischaemic heart disease and also swallowing difficulties.

When the nurses' construings of this patient are examined it can be seen that he was perceived as a patient who: - never asked any questions; was self-caring; did not experience pain; was not demanding of nursing time pre-operatively; had undergone very minor surgery; required routine nursing care post-operatively; had undergone routine surgery; was quite easy to talk to; was quite appreciative; was a bit anxious about his recovery; was making fairly good progress; was independent; had a curable disease and needed some information pre-operatively. The nurses further stated that they got some job satisfaction in caring for this patient, he made them feel quite happy, in that they enjoyed caring for him and found him quite comfortable to be with.

This interview took place by the patient's bedside in a
six-bedded room. He did not want to go somewhere more private and stated "You'll no be asking me any more personal questions than I've had already".

He stated that he didn't know what to expect coming in for an operation and that no-one had given him any information. "I've never had an operation before so I didn't know what to expect. But I knew that I would be well looked after". This disclosure fitted with the nurses perceptions that he needed information pre-operatively but it would appear that he was not given very much.

Whilst in the ward he had experienced angina-type pain on several occasions but did not tell anyone about it. This contradicts the nurses' perceptions that he experienced no pain. Furthermore he stated that he also "had just a little nausea the first morning afterwards. I told no-one it was to be expected I suppose. The other patients told me to expect it". Again this patient commented on the informal patient network for information.

When asked if he needed help with anything he replied:- "Getting into the bath whilst attached to the drip. Everything else I can do for myself". Again this fits with the nurses perceptions of him being self-caring.
He stated that he could always get help when he wanted it and that "the nurses are falling over you to help whether it is, here in the ward, in the intensive care unit, or down in theatre".

He felt that he got on well with all nurses and that "they've got a hard job. We're happy together. We've all got buzzers we can use. I'd only use it if it was something urgent". These disclosures corresponded with the nurses perceptions of him being easy to talk to, comfortable to be with, and not demanding of nursing time.

When questioned about being given information he stated that the doctors included him in their conversation. "You're not a third party. The doctors comment to each other as well though. I wouldn't want to know what they say then. Today they introduced me to the new surgeon and said that I'd be home on Thursday".

He had expected that his surgery would affect him now "for the better. I'll be able to eat properly and put some weight on. I'll need a high protein diet according to the dietician. I'll now be able to eat properly but I've still got angina and pain but at least I'll no die coughing and being sick and straining my
heart. This patient clearly felt that the surgery that he had undergone would change his life, whereas the nurses did not think so.

This patient then progressed to tell the author that he was an Elder in the church and was used to relating to people in hospital. "I know folks with pain and they can be funny but the professionals know how to deal with that. They've looked after me". From this statement it appeared that he was saying that no matter what idiosyncrasies individuals exhibited, nurses and doctors were able to manage and care for them.

When asked if he had any questions he replied "Is this for a thesis?" to the reply "Yes" he proceeded to tell the following story in a very loud voice in order to obtain the attention of the other men in the room:-

"The cleverest man I knew left school at fourteen, and had the rough with the smooth. A broken home, like me. My mother took in men when I was a wean. I worked myself up to an auditor, never got the full chartered accountant though. This other man is a minister. He worked night and day. It's no a' in the heid, you know, you have to work hard to get what you want". He then asked if we should pray together. The consensus from the author and the other five patients was that we preferred private
meditation.

This example is given to illustrate the nature of inter-patient relationships. This particular patient fell into the category of a "good patient" from the nurses' point of view in that he made little or no demand upon them. Indeed this was the patient "known least well" by all nurses (as shown in Chapter 5). It would appear, however, that most of his needs were being met with some reluctance by the other patients in the room. Whilst the informal patient support system and information network functions beneficially most of the time, the demands put upon ill patients by others can reach crisis point. In this particular six-bedded room the nurses were not aware of the potentially damaging group dynamics, and made no attempt to pre-empt overt conflict by planned bed-allocation nor by proactively instigating social interactions with patients in order to elicit concerns.

e. **The Business-Man**

The final case study is based on information obtained during an interview with a 42 year old business man who had undergone a coronary artery by-pass graft three days previously. He had a short history of angina and breathlessness and said that he was relieved to have the operation.
From the results of the nurses' construings this patient was perceived as someone who:-
was quite difficult to talk to; complained a little; was making quite poor progress; experienced very little pain; was not demanding of nursing time pre-operatively; had a poor prognosis; was quite anxious about his surgery and was quite anxious about his recovery. The nurses further stated that he had undergone very major and life-changing surgery, was now independent and self-caring and made them feel sad. Furthermore they stated that they felt sure of how to care for him, but did not really know him as a real patient and got some job satisfaction from looking after him.

During the interview this patient referred to the staff by the colour of the uniforms and said "the .... uniforms [nursing auxiliaries] tell me everything about the ward. My wife's a nurse here in this hospital". Most of his information came from the nursing auxiliaries as his wife was an auxiliary and was well-known to the particular nurses on the ward and in the operating department.

He also commented that the consultant surgeon had informed him of what to expect when he saw him at the out-patient department before surgery. He described
this information as follows:— "They would take arteries from my legs and up here somewhere [pointing to his chest and arms] to replace the clogged ones in my heart."

This seemed to be sufficient information for this patient and fitted with the nurses' construings that he did not require a lot of information pre-operatively.

He had experienced some pain recently and had asked the Sister directly for something to relieve the pain. When asked why he chose Sister he replied "because she's in-charge and might do something about it. If I was due pain-killers I got them. If not I was told just to relax and wait awhile". His experiences of pain did not correspond to the nurses' perceptions. The nurses commented that he had experienced very little pain yet the memory of the pain experienced by this patient were very strong and very powerful.

He also commented that he was experiencing a lot of nausea and reported this to one of the nurses. "I was told to try and drink plenty as the nausea was due to my high temperature. But every time I drank I felt worse. They didn't give me anything. I suppose they thought I was just feeling sorry for myself".

He continued, by saying that he had not slept well and had asked the doctor and the sister for something to help
him sleep. He stated "I had to ask and try and get something. They only changed my position and that wasn't any good at all. The nurses think I complain all the time but I've never felt so awful". These disclosures fit with the nurses' perceptions of him being a complaining patient and difficult to be with. But no-one appeared interested in helping him to feel better.

He stated that he felt that he got on "fairly good" with the nursing staff but that he was not included in conversations about himself when the doctors and nurses came round. He stated that "I don't think any patients are included really. No, I don't think so. Sometimes the one who did the operation will talk to you. The last time they came round they just said 'You're coming on well Mr....'".

This patient felt ignored and neglected by the health professionals and clearly expected more care than was being given. On returning home, he expected that:
"I will have to change my lifestyle completely. I'll have to stay in control and stop things getting on top of me. I need to realise that I'm not Mr Universe and can do anything. The physiotherapist and the cardiac nurse, (she's a bit like yourself), have told me things and helped me to realise that I'll need to change my lifestyle and take thing easy".
This was the first patient to directly mention the cardiac sister. This nurse is specially employed to provide health education and counselling support to cardiac patients before and after surgery. In this particular case she had spent some time with the patient regarding health education and he felt that he had benefited from her teaching.

When asked if there was a "special" nurse for him he replied "the night-shift are particularly good. You need more during the night generally and they are always there". His wife worked on night duty. This may have contributed to the fact that he found the night staff particularly helpful, possibly because his wife worked on an adjacent ward and was well known by the night staff on his ward. It may also be a contributing factor which explains why the majority of day staff nurses found this man difficult to talk to and not comfortable to be with. This patient was perceived as the moral supporter of the night staff by some of the day staff which may have led to a degree of alienation. This in turn, may have influenced the day nurses' construings of this particular patient.
6.3 Construing and Care

It has been shown from the data analyses in the previous chapter that particular factors or variables were statistically significant in influencing the construing patterns of the nurses. The significant variables were identified as follows:

- The place of work of the nurse.
- The number of previous posts held by the nurse.
- The type of RGN course completed by the nurse.

The conclusions reached in the previous chapter stated that the theatre nurses and the recovery room nurses were similar in their construings. The data obtained from the surgical ward nurses indicated that the construings veered towards the contrast pole of the construing statement and that the intensive care nurses tended towards the construct pole. If this analysis is developed further by an examination of the construing patterns, then it becomes possible to examine the nature of these differences. Table 32 presents the mean scores for all nurses by place of work for all constructs.
Table 32: Mean Score for Each Construct by Place of Work

<table>
<thead>
<tr>
<th>W</th>
<th>C</th>
<th>R</th>
<th>T</th>
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<tbody>
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<td>25</td>
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<td>1.73</td>
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<tr>
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<tr>
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<td>1.63</td>
</tr>
<tr>
<td>C 1.55</td>
<td>2.42</td>
<td>1.93</td>
<td>1.62</td>
<td>1.80</td>
<td>1.57</td>
<td>2.47</td>
<td>3.05</td>
<td>1.98</td>
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<td>2.27</td>
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<td>1.40</td>
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<table>
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<tr>
<td>T 2.60</td>
<td>1.13</td>
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</tr>
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</table>

Legend: WKPL = Workplace; W = Surgical ward; C = Cardiac Intensive Care Unit; R = Recovery Room; T = Theatre
If construct 1 is considered (Very easy to talk to - very difficult to talk to) then the recovery room nurses find the patients more difficult to talk to than any other group of nurses. During the construing interviews the recovery room nurses commented that patients often awoke from the anaesthetic quite confused and demanding answers to questions that they could not give. This demand on communication was a problem for both social and physiological reasons. On the other hand nurses who worked in the operating department were often engaged in social conversation in the anaesthetic room which had a limited range due to the drowsiness of the patient. The surgical ward nurses by comparison, had long periods of time with patients and many opportunities to converse. The intensive care nurses were very accustomed to talking to unconscious, semi-conscious and fully conscious individuals. These practical nursing reasons may explain the differences here.

On construct 3 (always asking questions-never asking questions) the intensive care nurses perceived the patients as asking questions more frequently than any other nurses. The intensive care unit is probably the most unusual environment that the patient experiences in his or her surgical career and from interviews with these nurses it would appear that the patient is regularly asking for orientation and clarification of what is
happening to them. Certainly this seems to correspond with the literature on environmental conditions and patients' reactions whilst in intensive care (Melia 1977).

Construct 4 (feel worried about - do not feel worried about). On this construct, both the theatre nurses and the recovery room nurses tended to feel more worried about particular patients than the intensive care and surgical ward nurses. This can be understood in terms of how quickly events can change in the operating department and how stressed the nurses are who work in this environment. Research by Astbury (1988) has indicated that nurses in operating departments are stressed by what might happen in any given surgical intervention that does not go according to plan. These events are very rare but remain a focus of concern for theatre nurses.

The mean scores on construct 6 (very dependent on nurses for all activities of daily living - self caring) threw up some interesting points. In this instance the recovery room and intensive care nurses saw the patients as dependent on nurses for activities of living. This fits the nursing practices within these two environments where the patients are either fully unconscious or semi-conscious most of the time, and are totally
dependent on nursing staff for their physical and psychological well-being. The ward nurse on the other hand saw most of the patients as self-caring. This reflects the practice of when patients are admitted to the surgical ward and also when they return to the ward following surgery (as explained in Chapter 5).

The theatre nurses saw the patients as not dependent on nursing staff but were keen to point out that whilst in theatre the patients were also obviously not self-caring. All the theatre nurses chose to use the construct and said that the patients were dependent on nursing and medical staff for all activities of living. So the perceived dependency score here reflects the quantity of nursing input into the patient's well-being whilst in theatre.

For construct 7 (experiences a great deal of pain - experiences no pain) the recovery room nurses saw the patients as experiencing pain more frequently than any other nurses. This can be attributed to the fact that a high proportion of nursing time in the recovery room is given over to the management of post-operative analgesia.

With construct 9 (very anxious about recovery- not anxious about recovery), the salient finding here was that the ward nurses who were caring for the patients up
until recovery did not perceive them as being as anxious about their recovery as did the other nurses. This could be due to the fact that the other nurses were speculating and empathising rather than knowing the real situation. The nurses themselves stated, however, that they based their scores on when they last interacted with the patient. The nurses were recalling the last point of personal responsibility that they had felt towards the patient. For the intensive care nurses this would be just before the patient returned to the ward. For the recovery and theatre nurses this could be during recent trips to the ward to fetch patients or to carry out pre-operative interviews.

Construct 16 (has curable disease-has fatal disease). For this particular construct the intensive care nurses were more likely to see the patients in terms of cure, whereas the other nurses were more pessimistic in their perceptions. This may be due to the relatively short time perspective of the intensive care nurses whose ideas of cure may be confined to discharge from the intensive care unit. Physiological stability is important in this setting but an holistic approach to care is well within the clinical parameters and would indeed strengthen the nursing role.

Each nurse knew all the patients who had come through the
unit and survived the traumatic immediate post-operative period and also those who had died whilst in their care. Death in the intensive care unit seemed to have a profound effect on the nurses who worked there as they perceived death as a reflection upon themselves, their professional judgements, and as a failure of their nursing care. Professional failure was important to these nurses and whilst the death of an individual was attributed to a very poor prognosis and health status the nurses perceived the situation in more personal terms and consequently appeared distressed.

Construct 17 (not independent enough - too independent), once again showed that the intensive care nurses saw the patients differently from the other nurses. They stated that the patients were not independent enough. During the construing interviews the nurses commented that once the patient has been extubated they often have to be "bullied" into doing things for themselves. Whereas the other nurses commented on how independent the patients were. For the surgical ward nurses this independence referred to both the pre-operative and post-operative phases. Whereas the theatre and the recovery room nurses were only referring to the pre-operative phase.

These results have implications for the practice of nursing. The working context is important in that it
fosters a different perceptual frame of reference when caring for the same patient. Different nursing priorities become paramount. For example the theatre and intensive care nurses are regularly making decisions which could be potentially life-threatening to the patient, whereas the ward based nurses are more concerned with the patient's return to normality. It is therefore essential that these differences are taken into consideration when planning care in these settings. Furthermore it is necessary that the parameters of care are formally differentiated and co-ordinated rather than left to inference or assumption on the part of the nurse.

To appreciate the differences in construing between those nurses who have held several surgical or cardiothoracic posts and the other nurses who are either in their first post or have held one other post it is worth looking at the construct-sets which were classified in chapter 4. That is the social interaction constructs (numbers 1,2,20,21,23); the professional judgement constructs (numbers 6,7,14,10,24); the psychological care constructs (numbers 3,8,9,11,17); the health progress constructs (numbers 5,12,13,15,16) and the personal constructs (numbers 4,18,19,22,25).

When these scores are compared it can be seen that the more experienced nurses apply the construct pole of the
social interaction, professional judgement and psychological care constructs more frequently than the other nurses. These nurses were confident and competent in caring for these patients but tended to use the contrast pole of the health progress and personal constructs indicating that they were more pessimistic in their outlook and assessment of the patient's future life. The nurses who had more clinical experience were also more dissatisfied with their jobs and felt quite sad about the patients they care for.

Whilst experience in a speciality is beneficial to many aspects of care, the dangers of over specialisation may be detrimental to the psychological well-being of the nurse and indeed may also exaggerate the fatalistic life perspectives they have towards cardiothoracic patients. It is important for nurses to recognise and manage these feelings and perceptions before they reach the point of burn-out and psychological stress occurs (Janis 1958, Prophit 1981).

The scores of the three graduate nurses who had undergone an essentially different, more academic course in nursing are worthy of comment. When the scores of these nurses are compared with the nurses who had undergone the three year training programme, then it can be seen that the graduate nurses apply the construct pole of the social
interaction constructs more frequently than the other nurses. The graduate nurses also disclosed more personal feelings and tended to use the construct pole of the personal constructs more frequently than the other nurses. Whether this is an indication of the emphasis on interpersonal skills and self-awareness in their degree programme or whether these nurses are more familiar with personal reflection requires further investigation. As the new nursing education programmes under Project 2000 (NBS 1991) are more academic and reflective, it may mean that there will be a whole new generation of nurses who will be more socially competent and self-aware. The introduction of such a changed nurse education programme does require a systematic longitudinal study in order to identify the qualities of the emerging and experienced nurse.

6.4 Construing and Patient Types

Alongside the particular attributes of the nurses which were shown to be highly significant, certain attributes of the patients were also shown to affect the nurses' construing. For example the type of surgery performed on the patient was shown to be highly significant. The nurses perceived cardiac and thoracic patients in very different ways. Particular patient case interviews have already been discussed and the major contradictions and corroborations with the nurses perceptions have been
identified. The final section of this current chapter will examine briefly the different scores on each construct by particular patient types. The following tables present the construct-types mean scores by specific patients for all nurses.

Table 33 Mean Scores of Social Interaction Constructs by Patient Type for all Nurses - Hospital A

<table>
<thead>
<tr>
<th>PATIENT CODE NUMBER</th>
<th>CARDIAC PATIENTS</th>
<th>THORACIC PATIENTS</th>
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<tr>
<td>20 2.04 1.41 1.93 1.48 2.41 1.89 1.63 1.48 1.63 1.56</td>
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<tr>
<td>21 1.63 1.15 1.56 1.22 1.67 1.63 1.41 1.44 1.41 1.33</td>
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<tr>
<td>23 3.11 2.44 2.63 2.30 2.89 2.04 2.37 2.63 2.52 2.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean 2.22 1.60 2.06 1.59 2.30 1.74 1.66 1.66 1.73 1.65</td>
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<td></td>
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<tr>
<td>Overall Mean 2.00</td>
<td>1.70</td>
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</table>

As can be seen there is a difference in the overall mean scores on the social interaction constructs for the cardiac and thoracic patients. The cardiac patients were less easy to talk to, less appreciative of the care received, and fairly comfortable to be with. The nurses stated that they enjoyed caring for the patients but felt
that they did not know them as real people. By comparison the thoracic patients were easier to talk to, more appreciative, and fairly comfortable to be with. The nurses enjoyed caring for the patients and knew them a little better as real people than the cardiac patients. The differences in ease of communication may be due to the fact that the thoracic patients generally spend a longer time in each working area and the nurses are therefore in longer contact with them.

When the nurses' professional judgement constructs are examined for each patient, a remarkably similar pattern emerges for each patient type. The results in Table 34 indicate that nurses classify and base their professional judgements on types of patients, and medical diagnostic criteria. If the cardiac patient mean scores for all professional judgement constructs are examined then it can be seen that they were very similar for each patient.

This indicated that, in the nurses professional judgement, the cardiac patients were not demanding of nursing time pre-operatively, required intensive nursing care in the immediate post-operative period, were relatively dependent on the nurses for activities of living and experienced little pain post-operatively. Finally the nurses stated that they were very sure of how to care for these patients.
**Table 34: Mean Scores of Professional Judgement Constructs by Patient Type for all Nurses - Hospital A**

<table>
<thead>
<tr>
<th>PATIENT CODE NUMBER</th>
<th>CARDIAC PATIENTS</th>
<th>THORACIC PATIENTS</th>
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<tbody>
<tr>
<td>Nos.</td>
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<td>1.96 2.04 1.96</td>
<td>2.30 2.11 2.41</td>
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<td></td>
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<td>7</td>
<td>2.52 2.30 2.30</td>
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<td></td>
<td>1.89 3.00 2.07</td>
<td>2.59</td>
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<td>1.04 1.15 1.07</td>
<td>1.19 1.11 2.22</td>
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<td></td>
<td>2.04 3.41 2.11</td>
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<td>1.56 1.19 1.48</td>
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<tr>
<td>Mean</td>
<td>1.80 1.75 1.75</td>
<td>1.80 1.77 2.01</td>
</tr>
<tr>
<td></td>
<td>2.01 2.76 2.00</td>
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<tr>
<td>Overall Mean</td>
<td>1.77</td>
<td>2.23</td>
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On the other hand, the thoracic patients were perceived as: less demanding of nursing time pre-operatively, requiring less intensive nursing care in the immediate post-operative period, requiring less nursing care with regard to activities of living and required less pain management. Finally the nurses stated that they were less sure of how to care for these patients. These differences may be due to the emphasis in Hospital A on cardiac surgery, and the fact that the majority of nurses had undertaken a course pertaining to cardiac surgery rather than a course which focused on the nursing care of
cardiac or thoracic patients.

Cardiac patients generally had surgery performed to correct cardiovascular disease, whereas the thoracic patients generally had surgery to remove a neoplasm. Within the cardiothoracic courses taught the physiological aspects of post-operative recovery from cardiac surgery were considered whereas various aspects of cancer and general thoracic surgery are not part of the curriculum. Consequently the oncological aspects of thoracic surgery were less familiar and therefore some of the nurses' professional judgements were only accurate and relevant to cardiac patients. The emotional needs and psychological well-being of patients with cancer were not in the forefront of their perceptions.

Table 35 provides the mean scores on psychological care constructs for both types of patients.
Table 35: Mean Scores of Psychological Care Constructs by Type of Patient for all Nurses - Hospital A

<table>
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<th>Psychological Care Constructs</th>
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<tr>
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<td>1.94</td>
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<tr>
<td>Overall Mean</td>
<td>1.78</td>
<td>1.99</td>
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</table>

What is remarkable about these results is the similarity in perceptions for both groups of patients. The patients were perceived as rarely asking questions, anxious about their surgery, quite anxious about their recovery, not requiring information pre-operatively, and not independent enough. This area of patient care as exemplified through the patient case interviews was not foremost in nurses' perceptions. In the case interviews, certain areas of concern were expressed by the patients and others were inferred from the patient's answers and knowledge of the speciality by the researcher. The patients openly demonstrated a high level of anxiety and
From some of the misconceptions and anxieties expressed it was inferred that this particular area of care was not adequately catered for by the nursing staff.

When the constructs on health progress are examined, then it can be seen that there are differences in the nurses' perceptions between the cardiac and thoracic patients in terms of health progress.

**Table 36: Mean Scores of Health Progress Constructs by Type of Patient for all Nurses - Hospital A**

<table>
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<th>Health Progress Constructs</th>
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<tr>
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<td>1.52</td>
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<tr>
<td>Overall Mean</td>
<td>1.70</td>
<td>2.23</td>
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</table>

From these data, it has been demonstrated that the cardiac patients were perceived as making fairly good progress, had undergone major surgery, had a fairly good
future life, had undergone life changing surgery, and had a relatively curable disease. By contrast, the thoracic patients were perceived as having made fairly good progress, had undergone relatively major surgery, had a poor future life, had undergone fairly life-changing surgery, and had a fatal disease. In this set of constructs the diagnosis of cancer was important in influencing the nurses' perceptions.

Finally, if the personal constructs are examined then a similar pattern arises for both groups of patients. Table 37 presents the mean scores of the personal constructs for all nurses. As can be seen, the scores of the personal constructs are similar for both groups of patients. The nurses were not particularly worried about the patients, some patients made the nurses feel happy, others made them feel sad. The key factors in determining how sad the nurse felt were a diagnosis of cancer and the age of the patient. A young patient with whichever type of surgery engendered feelings of sadness, for example the emergency cardiac patient and the 41 year old school teacher who had undergone repeated thoracic surgery.
Table 37: Mean Scores on Personal Constructs by Type of Patient for all Nurses - Hospital A

<table>
<thead>
<tr>
<th>PATIENT CODE NUMBER</th>
<th>CARDIAC PATIENTS</th>
<th>THORACIC PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nos. 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2.07 2.67 1.85 2.48 1.81 1.56 1.63 2.48 1.85 2.30</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2.41 1.74 2.37 1.74 2.93 3.44 3.41 2.59 3.00 1.67</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>3.30 3.33 3.56 3.56 3.70 3.44 3.44 3.30 3.30 3.22</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>1.41 1.56 1.59 1.44 1.56 1.15 1.11 1.44 1.37 1.41</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>1.52 1.26 1.56 1.22 1.52 1.89 1.59 1.96 1.67 1.63</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.14 2.11 2.18 2.10 2.30 2.29 2.23 2.35 2.23 2.10</td>
<td></td>
</tr>
<tr>
<td>Overall Mean</td>
<td>2.16                     2.24</td>
<td></td>
</tr>
</tbody>
</table>

No patient was perceived as being "like my mother or my father". The nurses generally felt sympathetic towards the patients and got some job satisfaction from caring for them. The level of job satisfaction was not particularly high. In fact the ward nurses commented that the speed of throughput of patients influenced how satisfied they felt with their work. The rapid turnover of patients for all nurses in each clinical area resulted in the nurses feeling that they did not know the patients particular well and were therefore unable to meet the patients' needs in a personalised way.
In conclusion the qualitative data derived from interviews carried out in Hospital A have shown certain similarities and some critical distinctions when compared with the quantitative data. An assessment of the data from Hospital B will now follow and a discussion of the findings of both main study results will be discussed in the penultimate chapter.
CHAPTER 7

Nurses' Perceptions of Patients in a New Cardiothoracic Unit: Quantitative & Qualitative Data Analyses.
7.0 Introduction

The research findings from the other part of the Main Study carried out in Hospital B will be presented. As with the other data chapters this chapter is organised into sections. The data to be presented have been analysed using the same statistical and qualitative methods previously used. It is therefore proposed to be brief in the explanation and elaboration of each stage of analysis and to concentrate on the findings and their implications for nursing.

The chapter has been organised into five sections which are:

- The hospital setting, access, sampling and administrative procedures.
- Biographical details of nurses.
- Care-planning
- Nurses' perceptions and construings.
- Patient interviews.
- Discussion and implication of findings.

7.1 The Hospital Setting, Access, Sampling and Administrative Procedures.

The hospital where this second part of the Main Study took place was a large teaching hospital in the east of Scotland. There were 600 beds in the hospital and a wide range of surgical and medical services were catered for. A nurse training college, the university faculty
of medicine, and a school of radiography were all closely attached to the hospital. Students from each discipline obtained a wide range of clinical experiences at the hospital.

The catchment area for patients was geographically large as this was the main hospital that provided health care facilities in the region. Some patients travelled great distances for special treatment. At the time of investigation, the cardiothoracic unit was entering its first phase of expansion and development. Cardiac surgery had been performed for several years on a piecemeal basis. A recent increase in government central funding had resulted in an extension of the service (SOHHD 1991/1992). Thoracic surgery was very well established as a treatment within the hospital. Indeed one ward had been dedicated to thoracic surgery for over thirty years.

According to hospital-based records and Scottish In-Patient Statistics for 1990, approximately 100 cardiac operations and 350 thoracic operations were carried out annually. These figures did not include diagnostic investigations. At the time of study cardiac catherterisation was routinely performed on all potential patients for cardiac surgery but angioplasty was rarely performed. This has subsequently changed as facilities
have been developed. As stated previously the data were gathered during the first phase of expansion. The projected figures for cardiac surgery for the year of study was 150 cases. This hospital has continued to expand and develop cardiac surgery and a rising number of cases are now performed annually.

As with Hospital A the same members of the medical staff performed both cardiac and thoracic surgery in the same operating theatre and with the same theatre nurses. The patients were cared for in the same surgical ward and recovery room within the operating department. The intensive care unit was not dedicated to surgery as in Hospital A but was a small general intensive care unit which catered for a wide variety of patients. All cardiac and thoracic patients did spend some time in the intensive care unit providing that bedspace was available. If this was not possible then nurses from the intensive care unit looked after the patient in the recovery room of the operating department.

The recovery room was large and could accommodate 12 patients at any one time. At the time of investigation approximately 200 patients per month were cared for in the recovery room. A special area of the recovery room was designated for the care of cardiac and thoracic patients.
The surgical ward could accommodate 30 patients. Both men and women were cared for on the ward. The style of the ward was 'racetrack' with six single and four six-bedded rooms. The utilities and nursing station were centralised and there was a large common-room available for patient socialising.

Cardiac and thoracic patients were first admitted to the surgical ward usually two days prior to surgery. On the day of surgery the patient was transferred to the operating department and taken into the anaesthetic room of the cardiothoracic theatre. After surgery the patient was then transferred to the recovery room where he or she would remain for at least four hours and probably longer. Similarly predetermined protocols, regarding the length of time a patient spent in recovery before being transferred either to the intensive care unit (subject to bed-space availability as described above) or to the surgical ward, had been devised by the nurses in the recovery room in consultation with the medical staff.

The nursing staff in this hospital were employed to work in one particular clinical area. At the time of investigation no internal rotation scheme operated. Student nurses were allocated to the operating department
with supernumary status for either a six or seven week period. Both junior and senior students were allocated to the surgical ward for 12 weeks. At the time of the investigation no students were allocated to the intensive care unit for clinical experience.

Prior to commencing the study, ethical clearance was obtained from the Joint Ethical Committee of the University and Health Board. In addition senior medical and nursing staff were consulted and confidentiality and anonymity assured following the same procedures described for Hospital A. Verbal consent was obtained from individual nurses and patients and the right to withdraw at any stage offered. Throughout this chapter this particular hospital will be referred to as Hospital B.

A sample of 24 first level nurses (23 female and 1 male) involved in caring for cardiothoracic patients was chosen. The sample consisted of: all nurses working in the operating department who were involved in caring for these patients; all surgical ward nurses, and a sample of nurses working in the intensive care unit.

It was necessary to draw a special sample from the nurses who worked in the intensive care unit for two reasons. Firstly, the number of nurses working in this clinical context was at least twice the number working in any of
the other clinical environments included in the study.

To have such a large number would have been disproportionate to the number of nurses from the other clinical areas and would therefore have skewed the findings. Secondly, as this was a general intensive care unit (rather than one dedicated to surgery) only a certain proportion of the nurses working there were involved in caring for cardiothoracic patients. For these reasons eight nurses were selected. This selection was based on duty rosters which were organised according to the surgical intervention proposed. Nurses allocated to care for cardiothoracic patients tended to be more experienced in intensive care nursing.

Table 38 presents the sampling ratios for nursing staff.

Table 38: Sample Population by Nursing Grade and Establishment Figures for Hospital B

N=24

<table>
<thead>
<tr>
<th>Grade</th>
<th>Sample</th>
<th>Establishment</th>
<th>1 as % of 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C/N</td>
<td>5</td>
<td>8</td>
<td>63</td>
</tr>
<tr>
<td>S/N</td>
<td>19</td>
<td>25</td>
<td>76</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>33</td>
<td>73</td>
</tr>
</tbody>
</table>

Column 1 shows the actual sample achieved, that is all nurses who participated in the study. Column 2 is the
maximum possible sample at the time of investigation, that is all the nurses who were on duty at the time of investigation and is the same as the establishment figures. The difference between columns 1 and 2 amounts to nine nurses. These nurses all worked in the intensive care unit and were purposely sampled out of the study.

Table 39 illustrates the number of nurses who participated in the study from each clinical setting.

Table 39: Nurses Place of Work - Hospital B

<table>
<thead>
<tr>
<th>Place of work</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive Care</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Surgical Ward</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Operating Theatre</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

As can be seen from the Table the total number of first level nurses working in a particular environment varies considerably. In the operating theatre there are only three first level nurses compared with a total of 17 in the intensive care unit (8 selected plus the 9 sampled out). Such a disproportion in staffing levels explains the necessity of sampling the intensive care nurses.
At the time of investigation there were twenty four patients in the surgical ward. From this population a sample of ten patients were selected who fulfilled the criteria described in chapter 4. In Table 40 details are provided of the sampled patients in Hospital B.

**Table 40: Sample Population of Patients - Hospital B**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Sex</th>
<th>Age (Years)</th>
<th>Admission</th>
<th>Surgery performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>51</td>
<td>Elective</td>
<td>Oesophago-gastrectomy</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>24</td>
<td>Emergency</td>
<td>Oesophagoscopy</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>67</td>
<td>Elective</td>
<td>CABG * 3 and Replacement of Aortic Valve.</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>55</td>
<td>Elective</td>
<td>Bronchoscopy</td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>54</td>
<td>Elective</td>
<td>CABG * 2</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>81</td>
<td>Elective</td>
<td>Replacement of Aortic Valve.</td>
</tr>
<tr>
<td>7</td>
<td>M</td>
<td>56</td>
<td>Elective</td>
<td>Oesophago-gastrectomy</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>61</td>
<td>Elective</td>
<td>Lobectomy</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>69</td>
<td>Elective</td>
<td>Pneumonectomy</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
<td>75</td>
<td>Elective</td>
<td>Laparotomy and Insertion of Atkinson Tube.</td>
</tr>
</tbody>
</table>

**Legend:** CABG * Coronary Artery Bypass Graft and the number of grafts performed.
As shown above, three patients who had cardiac surgery and seven who had thoracic surgery were selected and an equal ratio of men and women were selected. At the time of investigation the distribution of the sexes in the surgical ward was equal. This is unusual as there is a marked difference in the population as a whole of the incidence of coronary artery disease and lung cancer in Scotland (Scottish Health Statistics 1990).

The mean age of all patients in the ward was 64 years while in the sample it was 59 years. Generally the patients in this surgical ward were older than those in the sample population from Hospital A.

The procedure adopted for data collection from the nursing staff and from the patients was identical to that described in Chapter 5. All nurses who were invited to participate did so, and no-one withdrew. The patient interviews, as in the previous hospital study, were planned with the assistance of the nursing staff and in accordance with the ward routines and patient care. All ten patients were approached and asked to participate in the project. Each patient agreed and no-one withdrew at any stage.

At the time of the interviews all the patients were being
cared for in the same surgical ward and all had undergone surgery sometime during the previous week. Prior to commencing the interviews the researcher negotiated with the nursing staff to provide back-up counselling and patient support when necessary. In this particular hospital the researcher's experiences were slightly different. She had worked in the particular ward previously and was perceived by the nursing staff as not only an expert in cardiothoracic nursing but also as a senior nurse.

To try and overcome potential difficulties which could have arisen because of these role-perceptions, the investigator spent considerable time explaining the nature of the research to staff. The key points which were emphasised were that this was not an inspection of nursing care and that there were no right or wrong answers to any questions being asked.

To gain confidence and trust it was important that the nursing staff understood the potential policy developments and/or improvements that might result from the study. This approach was welcomed by the nursing staff and since both researcher and nurses had worked together previously it was assumed by the nurses that there would be a commonality of understanding and expectations.
The nurses were asked not to explain too much about the project to the patients as this would be done by the researcher prior to gaining consent for the interviews. In order to prevent too much contamination of the patients by the nurses (who may have tried to please the researcher by suggesting particular themes and topics to the patients), the patient interview schedules were not disclosed.

Table 41 describes the interview schedule which was devised for the patients who participated in the study from Hospital B. Compared with the patients in Hospital A, those in Hospital B were interviewed much later in the recovery process. This was due to the length of stay of post-operative patients in this particular hospital. Patients who had undergone major cardiac surgery generally remained in hospital for 2 weeks and those who had undergone major thoracic surgery remained in for two weeks before being transferred to another hospital for convalescence. Patients who had diagnostic investigations stayed in hospital for two days. The process of data collection in this instance was less intensive and therefore easier for the researcher to co-ordinate.
<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Surgery</th>
<th>Post-op day &amp; time of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>24</td>
<td>Oesophagoscopy</td>
<td>1st at 9am</td>
</tr>
<tr>
<td>Male</td>
<td>56</td>
<td>Oesophago-gastrectomy</td>
<td>5th at 11am</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>Bronchoscopy</td>
<td>2nd at 2pm</td>
</tr>
<tr>
<td>Male</td>
<td>67</td>
<td>CABG and Aortic valve replacement</td>
<td>7th at 1pm</td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>Lobectomy</td>
<td>4th at 3pm</td>
</tr>
<tr>
<td>Male</td>
<td>51</td>
<td>Oesophago-gastrectomy</td>
<td>10th at 4pm</td>
</tr>
<tr>
<td>Male</td>
<td>69</td>
<td>Pneumonectomy</td>
<td>4th at 2pm</td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>CABG</td>
<td>5th at 11am</td>
</tr>
<tr>
<td>Female</td>
<td>81</td>
<td>Aortic valve replacement</td>
<td>10th at 8pm</td>
</tr>
<tr>
<td>Female</td>
<td>75</td>
<td>Laparotomy and Insertion of Atkinson Tube</td>
<td>12th at 2pm</td>
</tr>
</tbody>
</table>

Legend CABG = Coronary Artery Bypass Graft.
7.2 **Biographical Data**

The results from the analyses of the biographical data questionnaires completed by the sample population of nurses from Hospital B will now be discussed. As stated previously, the sample of nurses was drawn from four clinical settings and covered staff from both day and night duty. There were no night nurses working in the recovery room and the theatre nurses were on call for cardiothoracic surgery. There were night nurses on both the surgical ward and the intensive care unit. Two first level nurses cared for the patients in the surgical ward during the night and five first level nurses worked in the intensive care unit at night. The two ward-based nurses and three of the five night intensive-care nurses were included in the sample.

The length of time in present post, as described in Table 42, indicates that nine nurses were in their first post and that the majority of nurses had been in post for over a year.
Table 42: Length of Time in Present Post - Nurses

Hospital B

<table>
<thead>
<tr>
<th>Length of time</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>1-3 years</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>4-6 years</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Over 6 years</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The age ranges of the nurses as shown in Table 43 ranged from 21 to 44 years, and

Table 43: Place of Work by Age of Nurse - Hospital B

<table>
<thead>
<tr>
<th>AGE GROUPINGS IN YEARS</th>
<th>Place of work</th>
<th>21-24</th>
<th>25-28</th>
<th>29-32</th>
<th>Over32</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical ward</td>
<td></td>
<td>2</td>
<td>8.3</td>
<td>3</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>ITU</td>
<td></td>
<td>1</td>
<td>4.2</td>
<td>3</td>
<td>12.5</td>
<td>3</td>
</tr>
<tr>
<td>Recovery Room</td>
<td></td>
<td>2</td>
<td>8.3</td>
<td>1</td>
<td>4.2</td>
<td>1</td>
</tr>
<tr>
<td>Theatre</td>
<td></td>
<td>1</td>
<td>4.2</td>
<td>1</td>
<td>4.2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>6</td>
<td>25</td>
<td>8</td>
<td>33</td>
<td>4</td>
</tr>
</tbody>
</table>

As can be seen from the Table 43 the distribution of age ranges by clinical workplace was fairly even. There was
not any one particular environment that attracted the younger nurses and no environment where the majority of nurses were considerably older.

Most nurses (21) had undertaken the three year RGN training only. Two of the remaining three were graduate nurses and the third nurse had undertaken a conversion course from enrolment to registration.

The number of post-basic courses completed by nurses in Hospital B was markedly different from those in Hospital A as can be seen from Table 44.

**Table 44: Post-Basic Courses Completed - Nurses Hospital B**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Number of nurses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive care</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Hyperbaric</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Anaesthetics</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Midwifery</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>8</strong></td>
<td><strong>33.33</strong></td>
</tr>
<tr>
<td>No post-basic courses</td>
<td><strong>16</strong></td>
<td><strong>66.66</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

This shows that the majority (16) of nurses had not
undertaken any post-basic education or training despite being in their posts for a relatively long time as shown in Table 45.

Table 45: Length of Time in Current Post by Post-Basic Courses Completed - Nurses Hospital B

<table>
<thead>
<tr>
<th>N=24</th>
<th>NUMBER OF POST-BASIC COURSES COMPLETED</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of time</td>
<td>1 or more</td>
<td>None</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>current post courses</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Under 1 year</td>
<td>4</td>
<td>17</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>1-3 years</td>
<td>2</td>
<td>8.3</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>4-6 years</td>
<td>2</td>
<td>8.3</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Over 6 years</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>33</td>
<td>16</td>
<td>67</td>
</tr>
</tbody>
</table>

The three nurses who had been in post for the longest time had undertaken no post-basic education at all. Two thirds (12) of the under-a-year nurses and those in post for 1-3 years had not completed any post-basic education. In this particular health authority there was, at the time of investigation, a shortage of clinical specialist courses for nurses. There were no cardiothoracic or theatre courses available and those nurses who had completed intensive care or anaesthetics courses had done so in a different health authority and then returned to
Hospital B to work. These nurses had not been seconded to undertake specialist training but rather chose to do so themselves.

When the place of work is compared with the post-basic courses completed, Table 46, the three theatre nurses had not completed any specialist training and one of the recovery room nurses had undertaken a hyperbaric oxygen therapy nursing course. Five intensive care nurses had completed post-basic courses these included, intensive care, anaesthetics and hyperbaric nursing. One ward nurse was also a midwife and the other had completed the hyperbaric course.

Table 46: Place of Work by Post-Basic Courses Completed

<table>
<thead>
<tr>
<th>POST-BASIC COURSES COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of work</td>
</tr>
<tr>
<td>Surgical ward</td>
</tr>
<tr>
<td>ITU</td>
</tr>
<tr>
<td>Recovery Room</td>
</tr>
<tr>
<td>Theatre</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Still on the theme of education, it can be seen from Table 47 that several of the nurses in the sample (11/24)
had attended one or more conferences/study days in the previous three years.

**Table 47: Number of Conferences and Study Days Attended during the Previous Three Years - Nurses Hospital B**

N=24

<table>
<thead>
<tr>
<th>Conferences/study days</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None in last 3 years</td>
<td>13</td>
<td>54</td>
</tr>
<tr>
<td>1 in last 3 years</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Several in last 3 years</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

The proportion receiving this type of occasional nursing education is slightly higher than those nurses in Hospital A. The in-service education department of Hospital B had a fairly extensive programme geared to meet some of the needs of clinical nurses. In addition, due to the shortage of post-basic courses the management of this hospital was prepared to fund individual nurses to attend study days and conferences outwith the region.

When the number of previous posts held since completing RGN training was examined, it could be seen from Table 48 that 10/24 of the nurses had held posts in other cardiothoracic units. These generally were in different hospitals throughout the United Kingdom.
### Table 48: Posts Held since Completing RGN Training - Nurses Hospital B

<table>
<thead>
<tr>
<th>Posts Held</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current post only</td>
<td>10</td>
<td>42</td>
</tr>
<tr>
<td>One previous post</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Several previous posts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In cardiothoracic areas</td>
<td>10</td>
<td>42</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Those nurses who had only held their current post were not all newly qualified nurses. In fact two of the nurses who had been in post over six years were in this category.

The majority (22) of nurses in this sample were satisfied with the adequacy of staffing-levels. Two nurses were dissatisfied: one of whom worked on night duty on the surgical ward and the other worked in theatre. Each of these nurses felt overstretched when on duty and stated that they did not have "time to do things properly". When asked to explain this, they commented that they were not able to get to know the patients very well and had a wide range of duties to perform for all patients. For the ward nurse these included; administration of medicines; specific aspects of surgical preparation such as skin cleansing; and the preparation of documentation.
On the other hand, the theatre nurse stated that she had to prepare trolleys, clear theatre after a case, and admit patients to the anaesthetic room. These nurses also stated that there was a time limit on some of the work they carried out. In addition they felt under pressure, from other members of the nursing staff, to complete specific duties and then help with general chores. For these two nurses there appeared to be a conflict of interests and each felt that too much time was spent on non-nursing duties such as cleaning. If they could be released from these duties they felt that they could spend more time in direct patient care. Interestingly, no other nurses commented on the disproportionate amount of nursing time spent on non-nursing duties. Non-nursing duties in the operating department and the surgical ward environment have been of concern to specialist nurses and managers for many years (West 1990). This finding illustrates some of the differences in understanding between nurses about the role and responsibility of the nurse.

7.3 Care-Planning

When the nurses were asked about their satisfaction with care-planning the results as shown in Table 49 indicated mixed feelings about care planning.
Table 49: Nurses Satisfaction with Care-Planning in Hospital B

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>11</td>
<td>46</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Unsure/Undecided</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The nurses working in the intensive care unit and the operating theatre were satisfied with care planning whereas those nurses who worked in the surgical ward and the recovery room were either dissatisfied or undecided about care-planning. When exploring what made for lack of a clear response it transpired that sometimes the patient's care was well planned and documented and at other times the nurses reacted to the situation as it arose. The recovery room nurses preferred to visit patients pre-operatively as this enabled them to plan nursing care in advance. However pre-operative visits were not always possible. The recovery room was often busy with patients well into the evening and the nurse on duty was unable to go to the wards to visit patients.

When asked what were the important aspects of patient care, over half of the nurses (15/24) stated that a combination of physical and psychological care was
Important. The three theatre nurses said that psychological care was most important. They emphasised their role in visiting patients pre-operatively to inform them of pain expectations, of what would happen on the journey to theatre and what to expect in the immediate post-operative period. Six of the intensive care nurses claimed that physical aspects of care were most important. When asked to explain this, the nurses stated that the monitoring of vital signs, maintenance of intra-venous fluid regimens, pain control and the personal hygiene of the patient were the most important aspects of care whilst in intensive care. It appears from this analysis that the nurses in both samples (i.e. those from Hospital A and Hospital B) were similar in their understanding of important elements of nursing care.

7.4 Nurses' Perceptions and Construings
The results from the analysis of the repertory grids will now be presented. To recapitulate briefly, the same perceptual constructs which were used at the validation stage and in the investigation carried out in Hospital A (Chapters 4 & 5) were supplied to these nurses. They were asked to rate each patient according to the constructs and contrasts supplied. Before commencing the construing interviews the details of the patients were
shown to the nurses and they were asked if they knew the patient. At this stage all nurses stated that they knew each patient in the sample.

Tables 50 & 51 show the percentage of patients in the study known to each nurse. The term "known" has a precise meaning namely, that the nurse had cared for the patient regularly and was able to describe the patient in terms of the constructs provided. If for a specific patient, a nurse stated that she could not apply 5 or more constructs to that patient, then for the purposes of this study it was assumed that the nurse did not know the patient.

On this basis the percentage of patients known by all nurses was 90%. Table 50 shows the percentage of sample patients known by each nurse. Nurse number 18 worked in the recovery room and did not know patient number 9 as she had been involved in caring for another patient when he came into recovery.
<table>
<thead>
<tr>
<th>NURSE CODE No.</th>
<th>% OF PATIENTS KNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>80</td>
</tr>
<tr>
<td>7</td>
<td>80</td>
</tr>
<tr>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>9</td>
<td>80</td>
</tr>
<tr>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>11</td>
<td>80</td>
</tr>
<tr>
<td>12</td>
<td>80</td>
</tr>
<tr>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>18</td>
<td>90</td>
</tr>
<tr>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

The overall % of patients KNOWN is 90%.

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The eight nurses who knew less about specific patients worked in the intensive care unit. They did not know the two patients who had undergone diagnostic investigations so well (Table 51).

Table 51: Percentage of Nurses who Knew each Patient -

<table>
<thead>
<tr>
<th>PATIENT</th>
<th>% OF NURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>67</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>96</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Percentage of nurses that know all patients is 94%

When the place of work and the percentage of patients known are compared then it can be seen from Table 52 that the intensive care nurses knew less of the patients than any other nurses. As previously explained this amounted to the two patients who had diagnostic investigations carried out.
As with the construing data presented in Chapters 5 and 6 it was decided to identify the variance in nurses' perceptions between all construct scores in order to identify the factors which influence construing.

Initially the separate quantities of the nurses' data were analysed and ranked according to the Mean Square value (MS Value). The results of this are presented in Table 53. In order to identify which of the variables accounted for the greatest analytical variance a regression analysis was carried out. The results are presented on Table 53 in rank order.
<table>
<thead>
<tr>
<th>Nurse Variable Squares</th>
<th>Sum</th>
<th>No.</th>
<th>MS Value</th>
<th>F Score</th>
<th>Signif</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERV</td>
<td>296.55</td>
<td>4</td>
<td>74.14</td>
<td>46.22</td>
<td>0.0000</td>
<td>1</td>
</tr>
<tr>
<td>CPUSE</td>
<td>142.36</td>
<td>2</td>
<td>71.18</td>
<td>43.69</td>
<td>0.0000</td>
<td>2</td>
</tr>
<tr>
<td>NURSE</td>
<td>784.94</td>
<td>24</td>
<td>32.71</td>
<td>21.41</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td>QUAL</td>
<td>104.70</td>
<td>3</td>
<td>34.90</td>
<td>21.33</td>
<td>0.0000</td>
<td>4</td>
</tr>
<tr>
<td>ANS</td>
<td>69.46</td>
<td>2</td>
<td>34.73</td>
<td>21.16</td>
<td>0.0000</td>
<td>5</td>
</tr>
<tr>
<td>NAGE</td>
<td>111.90</td>
<td>4</td>
<td>27.97</td>
<td>17.11</td>
<td>0.0000</td>
<td>6</td>
</tr>
<tr>
<td>IMPEL</td>
<td>81.65</td>
<td>3</td>
<td>27.22</td>
<td>16.60</td>
<td>0.0000</td>
<td>7</td>
</tr>
<tr>
<td>GRADE</td>
<td>40.45</td>
<td>2</td>
<td>20.23</td>
<td>12.29</td>
<td>0.0000</td>
<td>8</td>
</tr>
<tr>
<td>WARD</td>
<td>78.54</td>
<td>4</td>
<td>19.64</td>
<td>11.97</td>
<td>0.0000</td>
<td>9</td>
</tr>
<tr>
<td>COUR</td>
<td>71.72</td>
<td>5</td>
<td>14.34</td>
<td>8.74</td>
<td>0.0000</td>
<td>10</td>
</tr>
<tr>
<td>NSEX</td>
<td>26.43</td>
<td>2</td>
<td>13.22</td>
<td>8.02</td>
<td>0.0000</td>
<td>11</td>
</tr>
<tr>
<td>SATCP</td>
<td>32.06</td>
<td>3</td>
<td>10.69</td>
<td>6.49</td>
<td>0.0000</td>
<td>12</td>
</tr>
<tr>
<td>CONF</td>
<td>18.71</td>
<td>3</td>
<td>6.24</td>
<td>3.28</td>
<td>0.0096</td>
<td>13</td>
</tr>
<tr>
<td>STAFF</td>
<td>9.46</td>
<td>2</td>
<td>4.73</td>
<td>2.86</td>
<td>0.0566</td>
<td>14</td>
</tr>
<tr>
<td>POST</td>
<td>6.75</td>
<td>3</td>
<td>2.25</td>
<td>1.36</td>
<td>0.2518</td>
<td>15</td>
</tr>
</tbody>
</table>

Legend

Cpuse = Use of care-plans.
Ward = Place of work.
Conf = Study days conferences attended in last three years.
Staff = Satisfaction/dissatisfaction with staffing levels.
Nurse = Individual nurse.
Nage = Age of nurse.
Qual = RGN course completed.
Post = Number of previous nursing posts held.
Serv = Length of time in present post.
Satcp = Satisfaction/dissatisfaction with care-planning.
Ans = Post-basic courses been completed.
Impel = Important aspects of patient care.
Cour = Specific post-basic courses completed.
Grade = Grade of nurse.
Hosp = Hospital A
NSex = Sex of nurse.

ALL SAME HOSPITAL
The highest ranked variables were the length of time the nurse had been in post (SERV), the type of RGN course completed by the nurses (QUAL), and the perceived use of care plans (CPUSE). Analysing them initially (with their rank positions determining the priority of each variable in the statistical analysis), the length of time in present post (SERV) had the largest MS value and therefore accounted for the largest part of the variance in the scores. By changing the order of priority of the variable QUAL (type of RGN course completed) and CPUSE (perceived use of care plans) the significance value of CPUSE became less important and was only slightly significant at the 5% level. By continuing the analysis without the variable CPUSE (perceived use of care plans) it was deduced that the effect of this variable was fairly minor. In analysis of this sort it is sensible to assume that if the raw significance value of any one variable does not round to zero in say four decimal places, then the statistical significance of the particular variable on the overall analysis will be limited.

The next highest ranked variable was then added to the model (with CPUSE still present). This was the variable ANS (post-basic courses completed). With a significance level of 0.0378 it was decided to omit this from the
analysis as the effect was limited compared to that of the other variables. CPUSE also seemed insignificant. When the variable NAGE (age of the nurses) was added it was seen that this variable explained some of the variance of CPUSE. By swapping the order of priority CPUSE approached the 5% level of significance. This meant it could now be discarded along with the variable NAGE (age of the nurse) (Significance value 0.1516).

Similarly, when the variable IMPEL (important aspects of patient care) was added to the model it was shown to be insignificant with a significance value of 0.061.

By discarding IMPEL (important aspects of patient care) and adding GRADE (grade of the nurse) resulted in GRADE being significant at the 1% level. Although it accounted for less of the variance on the scores than the other remaining variables SERV (length of time in post) and QUAL (type of RGN training completed).

By continuing in the same way adding variables to the model to test their significance, WARD (place of work) was slightly significant. COUR (specific post-basic courses completed), NSEX (the sex of the nurse), and SATCP (satisfaction with care planning) were not significant. Analysing the effect of CONF (conferences and study days attended in the last three years) on the
model, CONF was found to be significant and by changing the order of priority it explained some of the variance previously attributed to the grade of the nurse (GRADE). Replacing the grade of the nurse (GRADE) with POST (number of nursing posts held) a further analysis was carried out. POST with a significance value of 0.4392 was found to be of little significance.

The final statistical conclusion reached for the analysis of the nurses' variables in Hospital B was that the significant variables were:

SERV: Length of time in present post.

QUAL: RGN course completed.

CONF: Courses and conferences attended in the last 3 years.

The place of work of the nurse was only slightly significant at the 5% level.

As with the nurses' variables the specific variables for the patients were also analysed in order to determine which of these had most effect on the construing scores.
Table 54 demonstrates the first stage of analysis for the patient variables. As can be seen initially all the variables appeared significant and when included in the analysis of variance in the order presented above (namely by rank priority) each remained significant. However by changing the priority order of the variables ADMIS (admission status) becomes insignificant. By analysing the remaining three variables in pairs the age of the patient (PAGE) is found to explain the variance initially attributed to the sex of the patient (PSEX). The type of surgery performed (SURG) remains highly significant throughout.

The most significant nurse variables were then added to
the model. By analysing SERV (length of time in post), QUAL (RGN course completed) and CONF (conferences and study days attended) with the type of surgery performed (SURG) and the age of the patient (PAGE) it was apparent that the variable on the length of time in post (SERV) explained the largest part of the variation in the scores whereas in comparison CONF (conferences and study days attended) explained a limited amount of the variance.

As in the analysis carried out in Hospital A the constructs were added to the model. Instead of fitting each of the 25 constructs separately they were split into the five classifications described previously and treated as replicates. These were then added to the model as shown. It was clear that the largest single effect was from SERV (length of time in post) followed by the sets of constructs.

To test and see if some of the effect of the nurses had not been accounted for in the variables SERV, QUAL and CONF the individual nurses NURSES variable was added to the model. The NURSES variable was significant and although its effect on the residual was less than that for the other variables it was assumed that the effect of individual nurses on the variation in scores was not fully accounted for by the three highly significant variables SERV, QUAL and CONF. That is in this case the
difference between nurses is significant at the 5% level.

In the same manner the individual patients (PATIENTS) were added to the model the effect of PATIENTS is very significant as it completely over-rides the effect of SURG (type of surgery) and AGE (age of patient) making these variables insignificant. This analysis suggests that the individuality and idiosyncracy of each patient accounts for the variation in nurses' construings. In nursing practice this would suggest that this sample group of nurses perceived these patients in a more personalised way than the nurses' in Hospital A who tended to perceive patients as types of surgical intervention. This is an important comparison between the two data sets and may indicate the difference between nurses perceptions in an established cardiothoracic unit (Hospital A) where the throughput of patients greatly exceeds that of Hospital B.

To conclude this stage of the quantititative data analysis the length of time in the present post, the type of RGN course completed and the conferences/study days attended are all highly significant in influencing the construing scores of the nurses. The difference between individual nurses is also significant but at the 5% level. The type of surgery performed and the age of the patient were shown to have a significant effect on the construing
scores of the individual nurses. But the differences between individual patients was highly significant at the 1% level, thus indicating that the individuality of the patients had a greater impact on the construing scores than the other patient variables. Some of nursing implications of these findings will be discussed in the concluding section of this chapter and more fully in the following chapter.

7.5 Patient Interviews: General Comments

As with the other patient interviews which were conducted in the elicitation and validation stages and also in the part of the study conducted at Hospital A, the author took precautions to devise the interviews in accordance with the various demands of the nursing service and priorities of patient care. Some of the interviews carried out with the sample patients from Hospital B were clinically more exacting as some of them were more critically ill than any interviewed in Hospital A.

Again the data presentation will be in two parts. The first part of this section deals with the general and quantifiable data obtained from interviews with all ten sample patients. The second part focuses on five case interviews which collectively illustrate the discrepancies between nurses' perceptions and patients' understandings.
All ten patients were keen to participate in the project and no-one withdrew at any stage. Six of the patients who were studied stated that they preferred to be called by their surname whilst in hospital and that all staff did this. The other four patients said that they preferred people to use their first name yet it was observed and explained that none of the staff did this. The majority (8) of patients said that they knew most of the nurses by sight but not by name. One other patient knew the name of one nurse and said that she had asked for her name. The final patient said that "the male nurse always introduces himself".

Seven of the patients described their admission to the hospital in similar terms. They reported themselves as usually being shown to the ward and waiting in the dayroom for a bed to become vacant before being examined by a doctor. The three cardiac patients all commented that they did not remember very much of what happened during their admission. They had forgotten most of the detail but knew that they were initially admitted to the ward by a nurse and did not have to wait in the dayroom for a bed.

The general events of the ward such as meal times, visiting times, newspaper deliveries and telephone
facilities were discovered by the patients themselves in 8 out of the 10 cases. The other two patients stated that members of their families or other patients told them about ward routines and various events. They did not expect the nurse to provide such information and it would appear that the nurses (as in Hospital A) did not consider this to be part of their role.

Most of the patients (9) reported experiencing pain and nausea to the nursing staff who usually treated the symptom with prescribed medication. One patient had no pain or nausea. Generally the patients said that their pain was dealt with quickly and effectively.

All patients commented that they did need help with various aspects of caring for themselves whilst in hospital. Three said that "things weren't explained". These patients felt that they did not get enough help from nurses or doctors. All patients said that they had been given enough information about their illnesses but did not know what to expect in terms of recovery and progress. As one patient said "I just trust the doctor".

When asked if there was a special nurse who cared for them six of the patients interviewed stated that there was a "someone special". In each of these cases this
person was special because he or she touched the patient in a particular personalised way that made them feel cared for. The remaining 4 patients said that all the nurses were very good and that there was not one special nurse.

The patients in this sample did not have any questions to ask of the researcher. Though half of those interviewed did invite the researcher back to speak with them when their families were visiting.

These general comments indicated that most of the patients were satisfied with their care most of the time. When individual patient case interviews were examined in detail however, certain corroborations and contradictions in the nurses' construings and the patients' understandings became evident. In addition the compliance with orders and acceptance of events, not necessarily beneficial, became obvious.
7.6 **Patient Case Interviews**

a. **The Farmer**

This first case study is based on information obtained during an interview with a 51 year old farmer who had undergone major thoracic surgery for cancer of the oesophagus (patient number 1 in Table 40).

This particular patient had to return to theatre because of a breakdown of his oesophageal-gastric anastamosis. He was interviewed on the 10th post-operative day following his first operation and the 8th post-operative day following the second surgical intervention. At the time of the interview he was receiving parenteral nutrition via a special intra-venous feeding line and light meals.

From an analysis of the scores on the nurses' construings grids it appeared that this patient was perceived as:- not very easy to talk to; an appreciative patient; always asked questions; very dependent on the nurses; was making good progress; experienced a great deal of pain; was quite anxious about his surgery; was a little anxious about his recovery; was quite demanding of nursing time pre-operatively; needed very little information pre-operatively; had undergone very major surgery; had a
poor prognosis; required intensive nursing care post-operatively; had undergone life changing surgery; had a fatal disease; not independent enough; and was fairly comfortable to be with. In addition the nurses also stated that they felt very sure of how to care for this patient; that he made them feel happy sometimes and sad at others; that they got some job satisfaction from caring for this patient; that he was a little like their father; and that they felt worried about him.

When asked what happened when he was first admitted to the ward he explained that he had some problems with swallowing and "I saw the consultant on the Thursday and was admitted there and then. I had no wait for a bed". He continued by stating that he obtained most of his information about the ward from other patients. When asked what he expected when he went to the operating theatre he said "I just fancied that I'd see strong lights. That it would be like on TV. I've never been in hospital before. In fact the nurse and the porter who took me to theatre the second time were very kind and helpful. They explained what was happening to me".

When asked if he experienced any pain or nausea he said that he did, and asked the nurse who "told a junior doctor who examined me and didn't think it was serious. It was though!! I've only had sickness today with the
fish. I dinnae like fish but there was nothing else. I told the consultant and he said that I'd need to watch what I ate". These disclosures corroborate the nurses' construings about his pain experiences.

When asked if he had been able to sleep he replied "I get a good sleep now. The night male nurse got me a sleeping tablet. It was very bad to begin with".

He told me that he needed help to get up and that either his wife or a nurse helped him. He said that he had "lots of wee tubes to begin with. It's quite easy to move I just hae tae watch and nae turn too fast and pull it oot. Other things I can do for myself. I'll soon be home again".

The nurses construed this patient as being very dependent on them, yet he stated that he only needed help with a few things. This apparent contradiction continues in the next statement where the patient commented that he got on "OK with the nurses. They're a' very nice and helpful. In the other room I was in I had a buzzer, here I just shout. You dinnae see o'er much o' them [nurses] sometimes. They [doctors and nurses] include you to a certain extent. Most o' the time the information is for them onywey. The last time they were round the doctor told me to watch what I eat and to take fizzy drinks".

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This does however fit with the nurses' statements that they found this patient not very easy to talk to and therefore did not initiate contact with him. However, when he initiated contact they actually found him comfortable to be with. He never mentioned his diagnosis nor prognosis and although the nurses construed him as having a fatal disease they also saw him as making good progress at this particular stage of his recovery.

He said that most of his tests were explained to him by the staff nurse who told him where he was going to have them carried out. The results were not explained to him. "I widnae like them a' explained. Nae them a', maybe nae them a'. The test are for their benefit nae mine. I trust the doctors and the nurses - they ken their job just like I ken mine".

When asked if he thought that his illness and operation would affect him once he went home he said "The doctors explained the operation and told me that I'd need to rest up in bed. Eat small meals and don't eat and then bend. I dinnae think I'll need special care, the wife'll cope wi' it". These comments correspond with the nurses' perceptions that he was not too anxious about his recovery.
When asked if there was a special nurse for him he said that the nurse in theatre was special to him "she went to X-ray and then into the theatre with me. She comforted me. I owe a lot to that quine [young woman]. She's been to see me here on the ward".

He stated that he felt that he had been given enough information about his operation, his recovery and progress from the consultant and commented that "I dinnae understand names of things but I feel I know enough. I'm getting better myself. I'll just take it a bit easy at home to start with. The beasts'll be a' richt". He then stated that his wife was looking forward to having him at home although she was a bit concerned about his eating. "The auldest loon [oldest son] is looking after the beasts [cattle] and the farm, I'll just hae to take it easy and no be impatient to get back to normal".

b. The Health Professional
This second case study is based on information obtained from an interview with a 54 year old man who had undergone a coronary artery by-pass graft a few days previously (patient number 5 in Table 40). He had a previous history of angina and breathlessness and was unable to walk any distance.
From an analysis of the scores on the nurses' construing grids this patient was perceived as:-
being quite demanding of nursing time pre-operatively;
needed little information pre-operatively; being fairly easy to talk to; an appreciative patient who asked some questions; was making fairly good progress; was virtually self caring; experienced some pain; was quite anxious about his surgery; was quite anxious about his recovery; had undergone major surgery; had a poor prognosis; required intensive nursing care; had undergone fairly life changing surgery; had a curable disease; was not independent enough; and was very comfortable to be with. In addition the nurses also stated that they felt very sure of how to care for him; that he made them feel happy and that they knew him as a real person.

The interview was carried out in a single room in the ward. When asked where he obtained most of his information about what to expect and the normal routines of the ward he replied that he "knew hospital routines and I just notice things going on". This particular patient knew a lot about cardiac surgery as he was a member of one of the health professions.

He said that he had been a bit confused after his surgery and wondered where he was. "I woke up in ITU and didn't know whether it was day or night". He stated that he
felt as though he had "lost time somewhere". He also commented that he had been given a lot of information before the operation by a member of his family and already knew what to expect when he came into hospital. This statement fits with the nurses construings that he required very little information pre-operatively.

When asked about his pain and nausea experiences he replied that the nurses always gave him something for it whenever he asked. He felt that he had been given "plenty of information from Mr......" [consultant] about his illness, progress and recovery and knew that he would have to change his lifestyle and "take more exercise and stop smoking". He then commented on the fact that he had not smoked a cigarette since he had been in hospital and was not craving one. He concluded by saying "I'll need to keep it up, I hope I can". This again fits with the nurses perceptions upon his anxiety regarding his recovery.

When asked if there was a special nurse who had cared for him he said "all the nurses are good. They know their job and look after you well. I'm going to............[convalescent hospital] fairly soon. That will be easier for the family to visit".

This particular patient answered all the interview
questions with a high degree of professional knowledge about his condition and recovery process. All the information was acquired from his own knowledge base rather than the nursing or medical staff in the cardiothoracic ward. This patient made almost no demands of the nursing staff and was perceived very positively by the nurses! Whether this was due to the fact that he appeared to be a good patient who conformed to the role or whether it was other associations namely that he was a health professional is not known. It does however raise an interesting point: how do nurses perceive other health professionals when they are patients and does this effect their care?

Recent (anecdotal) articles in the nursing press indicate that when a nurse or a doctor is a patient then they are expected to know all about the illness, progress and recovery process. This is not always the case and from personal discussions with colleagues who have been in this position it would appear that they actually feel quite neglected, confused and angry about the course of treatment whilst in hospital as a patient. This is an interesting topic which requires further investigation but is outwith the terms of reference of this particular study.
c. **The Traveller**

This third case study is based on information obtained during an interview with a 61 year old lady who had undergone thoracic surgery for cancer of the lung a few days previously (patient number 8 in Table 40). In the past this lady had spent a lot of time travelling around the world but over the past three years she had developed chest pain and had experienced breathing difficulties.

Once again from an analysis of the nurses' construing scores it appeared that this patient was perceived thus:- not demanding of nursing time pre-operatively; needed some information pre-operatively; quite difficult to talk to; slightly complaining patient who always asked questions; was making quite poor progress; was quite dependent on the nurses; experienced some pain; was not very anxious about her surgery; was not very anxious about her recovery; had undergone less major surgery than the cardiac or other thoracic patients; had a poor prognosis; had undergone life changing surgery; was too independent; and was not comfortable to be with. In addition the nurses stated that they did not feel very sympathetic towards her; were not too sure of how to care for her; and felt that they did not know her as a real person.
This lady was in a single room on the ward and was visited very regularly by her sister. When asked about how she knew of the ward routines and normal events such as meal times, visiting times etc. She said:—

"I don't really know. My sister asked about visiting. I shut my room door because people are always staring in. I miss the newspapers. They [the nurses] are very lax about telling you. I wouldn't have known about the library unless my sister who was put out by the dragon-lady [that is the physiotherapist] hadn't seen the ladies with the trolley. She asked if they had any Mills and Boon, bloody awful books really, but I like to read them. They are very lax about telling you anything like that. Also no-body introduces themselves. I just ask though". These disclosures fit with the nurses' construings that this patient was always asking questions.

When asked what she expected when she went to the operating theatre she replied "Mr ......[consultant] told me some things. There are nice girls done there, very caring. One held my hand she's special. That was nice".

She said that she had experienced a lot of pain since her operation. "I told everybody about it, nurses and doctors. I have a low pain threshold. Maybe not."
Maybe others would be screaming. I had one horrible incident. I was having my first cup of tea in two days when this lady comes in and pushes my tea aside and starts to pummel me. I told her that this was my first tea in two days. The pain was awful. I called her the dragon-lady and told her to get out. The next day she came the nurses gave me pain-killers beforehand. One good thing though was that she (the physiotherapist) got me a ladder. When she first said this I thought where the hell does she expect me to climb to. It was a rope ladder for pulling yourself up the bed". (This apparatus is widely used in cardiothoracic wards to assist patients with mobility and movement whilst in bed. One end of the ladder is attached to the base of the bed and the length of the ladder reaches the patient. The patient sits themselves up by pulling against the rungs of the ladder).

She said that she had been sleeping fairly well but that the hospital was noisy during the night. When asked if she needed help with anything in particular she replied "I have needed help with these tubes (chest drains). Today I didn't though. I walked back from X-ray myself. I gave up waiting for a porter. I have to be careful that I don't lie on these tubes".

Her relationship with the nursing staff she described as
"very good. Most of them are very good and kind. They are. I'm not backward at coming forward to ask any questions. I just use the buzzer or call them ".

When asked about what information she had been given about her surgery and recovery she stated that she felt that she had been given information by the consultant whom she described as "very good indeed". She also said that she felt included in conversations with doctors and nurses when the ward round took place. "The last time I saw them the doctor explained that my lung was expanding and that I should be ready to go home soon. I've enjoyed being in here but now I've had enough".

She continued stating that all of the tests carried out on her had been explained. "Mr ...........(Consultant) tells me or I ask him. I know I had cancer and that I've just bought time. I'd only have six months or so if I hadn't had the op. I'll have to give up smoking. I promised my sisters that I would. But hell I think if I knew that I'd have a couple of years and go out painless I'd continue with my cigarettes. God-damn-it I like my cigarette".

When asked if there was a special nurse for her she said "Yes, the nurse in theatre who held my hand and the nurse who stayed with me all night after the operation."
They've visited me since. They've been quite special and helped me when I was low.

She then said that she felt tired and wondered if there were any more questions. When asked if she wanted to ask the author anything she replied "No I've enjoyed talking to you but I want a wee sleep before my sister comes in".

This patient was a very independent and forthright lady. Her particular interpersonal style may have intimidated the nurses somewhat and influenced the pattern of their perceptions of her. Her own robust approach to the severity of her illness and treatment of lung cancer in conjunction with her flippant communicative style may have contributed to the nurses being unsympathetic towards her and finding her difficult to care for. She did not acquiesce and conform to the passive patient role and therefore it is suggested that she was perceived by the nurses in certain respects as a difficult patient.

d. **The Retired Teacher**

The fourth case study is based on information obtained during an interview with a 67 year old retired school teacher who had undergone coronary artery by-pass grafting and an aortic valve replacement (patient number 3 Table in 40). He had a long medical history of breathlessness
and angina which had become much more severe during the previous eighteen months.

The nurses construing scores indicated that this patient was perceived thus:- quite easy to talk to; an appreciative patient who always asked questions; was making quite good progress; was very dependent on the nurses; experienced some pain; was not demanding of nursing time pre-operatively; had undergone major surgery; had a poor prognosis; had a fatal disease; was very like the nurses' fathers; and was very comfortable to be with. In addition the nurses also commented that they enjoyed caring for him; they felt that they knew him as a real person; and that they were very sure of how to care for him.

This patient was in a single room on the ward and when approached and asked if he would be willing to participate in the interview he said "I'd be delighted but I better warn you I'm consistently confused about things since my operation. I haven't a clue what's been happening. I don't remember anything before my operation".

When asked about how he knew about ward events and routines he replied "I've been working out when things happen in the ward. Nobody has told me. I have a big
family. People are always coming in during the afternoon and evening so I suppose they can visit any time. I heard the paper lad so I know about newspapers but I still don't know when meals are served. They seem to appear at any old time".

This patient was trying to infer from happenings around him what were the ward routines. He did not feel that it was appropriate to ask the nurses for such information. This fits with the typical idea of the patient role being one of passivity and the role of the nurse being medically rather than socially focused.

When asked what he expected when he went to the operating theatre he said "Well I'm very old for this operation. I thought that was it (meaning death)". At this point he became tearful and said "everyone here is so good. I'm relieved to have lived. But I'm angry at myself for being so confused. I keep thinking that I am somewhere else. I don't know where exactly. I still need help with everything really because I keep thinking that I'm elsewhere. Today is the first day I got up by myself. I still have this wire. It is like a pace-maker but they are going to remove it soon".

His confusion over where he was could be attributed to post-anaesthetic confusion or the fact that in the last
week he had been cared for in three different clinical environments and did not know it.

When asked if he felt included in the doctors' and nurses' conversations he said "The doctors less so than the nurses. Usually I am by myself". By this he meant that he spent most of the day in his room alone. Once more the patient became tearful and when asked if he would like me to go, replied "no it is better when I have someone to talk too. I don't know why I'm tearful. I feel I don't remember things but maybe I do. I'm a retired schoolteacher and should know what is happening". This patient's sense of loss of independence and control was of concern to him and also impinged upon the nurses' perceptions of his apparent dependency on them.

When asked if he had been given sufficient information about his illness and recovery he replied that "the doctors and nurses had told me some things about exercise and diet when I go home. But nobody explained this confusion. I wish they had warned me".

He concluded this part of the interview by saying:-
"I get confused but I'm so relieved to be alive and OK. I was very old for the major op. I'll be going to....... [convalescent hospital] fairly soon. My family will look after me until I get back to normal".
When asked if he wished to ask any questions he said:—
"No. But when you write this up remember not to stereotype me as a confused geriatric. Some of the nurses treat me like that".

For this patient the loss of control and independence were important and difficult events for him. The reaction of the nursing staff towards him appeared very supportive from the construing statements but was perceived as being patronising at times by the patient.

e. **The Policeman**

This fifth and final case study is based on information obtained during an interview with a 56 year old retired policeman who had undergone major thoracic surgery for cancer of the oesophagus (patient number 7 in Table 40). He had a short history of swallowing problems and weight loss.

From the analysis of the nurses construing grids this patient was perceived thus:—
quite easy to talk to; not very appreciative; rarely asked any questions; was very dependent on the nurses; experienced a great deal of pain; was very demanding of nursing time pre-operatively; needed a lot of information
pre-operatively; was very anxious about his surgery; was quite anxious about his recovery; had a poor prognosis; was very like the nurses' fathers and was very comfortable to be with. In addition the nurses also stated that they felt quite sympathetic towards this man; that they knew him as a real person; quite difficult to be with; and that they get a lot of job satisfaction from caring for this patient.

This man was in a single room in the ward and had not ventured out of it at all. He said that he knew a few of the nurses by name and had "just asked them what they were called when they were working with him".

He knew about the normal ward routines by observing what was happening but did not know there were such things as a public telephone or a day room for all patients. "Nobody told me about those things".

When he described what he expected to happen in the operating theatre he said "It was much more traumatic than I imagined. I had to go back because of a bleed. It was very traumatic, a major operation. One of the doctors explained the operation to me she even had some diagrams for me to look at so that I would understand. I've had a little pain since the operation but I don't need to tell anyone. The nurses know and give me either
an injection or pain-killers". This disclosure corroborates the nurses perceptions of his pain experiences.

When asked about his ability to sleep and rest he replied that "hospitals are noisy. I have slept but not the same as normal. I was given an injection to help me sleep, that helped....... but not like at home". When further asked if he need help with anything he replied "not really just to get on the commode. This is some sort of vacuum [pointing to chest drain]. Well it is a problem. The nurses come in and look after the tubes and things. I've no idea what it all is really".

When asked if he felt he could get attention when he wanted it he said that "if you shout loud enough someone will always answer your questions! They keep you fairly well informed I suppose. I always feel that I am the most important member of the group when the doctors and nurses come round. The last time they came round they told me that I could swallow a drink and if that was alright I could start normal food. The surgeons tell you most things. My first examination was positive so I needed this major operation. Nobody has actually told me how bad it is but I know. My wife will look after me when I am at home".

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From this statement I understood the patient to be saying that he knew the severity of his cancer and that the surgery was palliative. No member of the medical or nursing staff had discussed this with him nor his forthcoming radiotherapy treatment.

I asked if there was a "special" nurse who cared for him; he replied "Yes, there's always one for every patient. She has been so interested in her own profession. Keen to learn and kind of reminiscent of myself at her age. She's a good one".

He said that he felt that he had enough information about his progress and recovery stating "I am making a slow recovery but I am improving. I don't know when I'll go home. The Sunday School children are missing me and I'm missing them".

The interview finished at this point as his wife had joined us. They invited the author to stay for a while and we discussed the various social topics such as the weather, the difficulties traveling to the hospital and this research. His wife commented that "everyone has been so good but I hope he gets home shortly".

This patient appeared very passive and was resigned to wait for things to happen to him. In this case the
patient was withdrawing into himself and becoming depressed. The nurses found him quite easy to talk to as he did not ask any difficult questions about his own prognosis. They did however find him quite difficult to be with in case he should ask about his cancer and the success of the surgery. As a couple he and his wife appeared to feel that they could cope better in their own environment rather than the hospital.

The passivity of the patient role and the acceptance of hospital routines are important not only to the patient but also to the nurses as it reduces the extra demands made on them. For when a patient challenges the passive role he or she is perceived more negatively and as unappreciative, less easy to talk to and less comfortable to be with. The routinistation of care though less marked in Hospital B than in Hospital A provides a framework for both nurses and patients. Informing the individual of key routine events was not regularly part of the nursing role rather the patients were left to infer from events by themselves.

7.7 Concluding Comments

This final section will briefly draw out some of the nursing implications of the findings discussed so far. The statistical analyses of the nurses' construing grids indicated that certain factors or variables influenced
the construing scores. The most highly significant nursing staff variables which accounted for the patterns of construing were the length of time that the nurse had been in his or her current post; the type of RGN course completed by the nurse and the number of conferences or study days attended in the last three years.

The place of work of the nurses was less significant (at the 5% level) as was the type of surgery performed on the patient and the age of the patient. If the length of time in post is considered against the scores on the construing grids then those nurses who had been in post 3 years or more were using the construct pole of the construing statement more frequently than any of their colleagues. They also were more pessimistic in their professional judgements and more likely to self-disclose about personal construings.

The findings for the graduate nurses were similar to those in Hospital A. These two nurses used the construct pole of the social interaction and personal constructs more frequently than any other of the nurses.

The number of conferences and study days attended influenced the scores on the psychological care constructs. Those nurses who had attended several study days in the last three years tended to use the construct
pole of the construing statement more frequently. That is they tended to see patients as being anxious and requiring information. This may reflect the content of in-service education sessions which were held in Hospital B.

Variance on the specific workplace of the nurse although less significant than in Hospital A produced interesting findings on the construing patterns. The surgical ward nurses tended to use the contrast pole of the construing statement more frequently than any other group of nurses. The intensive care nurses tended to use the construct pole more frequently and the theatre and recovery room nurses tended to construe patients similarly. All nurses who participated in the Hospital B were more willing to utilise the personal constructs fully than the nurses in Hospital A. This may be attributed to the fact that these nurses knew the researcher very well and felt more at ease and open than the other nurses in Hospital A.

The type of surgery performed on the patient was only slightly significant. Individual characteristics of each patient seemed to be more important in influencing the construing scores of the nurses. The nature of these individual characteristics requires further investigation in another study.
It is suggested at this juncture that the lack of routinisation and relative unfamiliarity with cardiothoracic surgery may be more of a causal attribute than any patient idiosyncracy. At the time of investigation this was an expanding and developing cardiac centre. It would be interesting to return again and repeat the investigation as the throughput of patients and specialisation of nursing services now increasingly resembles Hospital A. The full implication of this statement and some further comparisons between the two Hospitals will be presented and discussed in the next Chapter.
8.0 Introduction

This penultimate chapter will address the findings and the pertinent analytical themes from the four data chapters. The aim of the chapter is not only to discuss the findings but also to draw some wider implications from the results.

To begin, it is necessary to reflect upon the research questions which were posed originally. This thesis has set out to explore the actuality of the nursing process, to identify particular factors which influence nurses' construing of events, and decision-making in specific clinical areas, and finally to gain an insight into the care experiences of cardiothoracic surgical patients. The answers to the specific research questions posed earlier can be summarised as follows:

QUESTION 1. Are there common constructs used by nurses who are involved in caring for cardiothoracic surgical patients?

ANSWER. Yes, and these constructs can be typified as:- social interaction; professional judgement; psychological care; health progress and personal constructs.

QUESTION 2. Does the working context have any bearing on nurses' perceptions of patients?
QUESTION 3. Do nurses working in a particular clinical context perceive the same patients similarly?

ANSWER Yes. The majority of nurses perceived the same patients similarly. Graduate nurses appeared distinct in that they distinguished patients differently regardless of working context.

QUESTION 4. Is there any connection between the nurse's perception of the patient and the patient's diagnosis?

ANSWER Yes. Patients who had undergone cardiac surgery were perceived differently from those who had undergone thoracic surgery.

QUESTION 5. Is there a connection between the nurses' perceptions of patients and the patients' age and sex?

ANSWER No. The age and sex of the patient were not significant in terms of the effect these variables had on the nurses' construing scores.

QUESTION 6. Do nurses perceive patients in terms of the physical care they require?
ANSWER  Yes. Nurses were able to identify and meet the physical needs of cardiothoracic patients in all working contexts.

QUESTION 7. Do nurses perceive patients in terms of the psychological care they require?

ANSWER  No. Because the concept of psychological care had a very restricted meaning to the nurses included in this study.

QUESTION 8. Does the previous experience of the nurse have any bearing on how s/he perceives the patient?

ANSWER  Yes. This variable was particularly significant in Hospital B.

QUESTION 9. Does the educational background of the nurse have any bearing on his or her perceptions of patients?

ANSWER  Yes. Graduate nurses perceived patients differently from nurses who had completed the three year RGN course. Post-basic training in a speciality also influenced construing patterns.

QUESTION 10. Do nurses' perceptions of the patients' care correspond to patients' perceptions of care?

ANSWER  Yes in part. However there were many discrepancies between the patients' understanding and the nurses' understanding.
From the answers obtained it can be deduced that there are commonalities of construing in nursing practice and that certain factors influence nurses' perceptions of patients in the nursing process. These factors included the working context, the educational background of the nurse, the type of surgery performed on the patient, and the duration of employment in one post for the nurse.

The commonality of the findings in terms of construing patterns, patient experiences, patient role, focus of care-planning, nurses' understandings of psychology and the actuality of nursing are, however, of concern to all nurses. Consequently the implications of these findings will be discussed in general terms in the present chapter under the following headings:

- General comparisons: Hospital A and Hospital B.
- Working context.
- Personal constructs
- The perceived role and self-image of the nurse.
- The construed needs of the patient.
- Care planning and work organisation.
8.1 General Comparisons: Hospitals A & B

The organisational structures of each teaching hospital were remarkably similar, as was the process of nursing and medical care for cardiothoracic patients. In each hospital the patients spent some time in three different clinical environments.

In Hospital A the internal rotation system (for nursing staff) between the intensive care and the ward would have been better if it had been planned around patient need rather than the logistics of staffing. The principles behind such a programme are worthy and could assist in the nurse obtaining an overall understanding of the health status of the patient. However, in the hospital setting, care was ordained by the reality of resourcing rather than a philosophy of care.

In each hospital the increasing specialisation of care has resulted in the fragmentation of care and a restricted sense of job satisfaction for the nursing staff. This pattern of specialisation may be potentially limiting to the role of the nurse. The diversity of clinical environments and nursing specialities resulted in confusion and disorientation in time and place from the patients' perspective.
The throughput of patients and the routinisation of care were inter-related in the long-established cardiothoracic unit of Hospital A. The rapid throughput of patients and the demands being made on the cardiac services were intense. By comparison, at the time of the investigation in Hospital B, cardiac services were in the first stages of expansion and development. Consequently patient care was more personalised for the particular individual, rather than organised according to type of surgery.

In Hospital A, the patients' care needs were identified and inferred from medical diagnosis alone. This routine was especially so of all theatre nurses (in both hospitals) who planned care according to types of operation. The recovery and intensive care nurses relied on medical staff to inform them verbally of patients physiological needs. Clearly in each of these situations, the authority of the doctor was perceived by the nurses as being more significant than any of their own determinants of care or health. Priority was given to medical directives and nursing initiatives were secondary. Monitoring of vital signs was paramount. Oral hygiene, patient positioning and communication, for example, were perceived as less important.

In each hospital certain factors were shown to have
influence on the nurses' construings. The similarities here were the clinical settings, and the type of RGN course completed. These particular findings will be discussed more fully later in the chapter.

On the one hand, in Hospital A, the number of previous posts held was also significant in influencing the construing patterns. As a system of internal rotation was operating in this setting, the nurses were obliged to spend time working in, and gaining experience of, the whole gamut of cardiothoracic surgery. This situation resulted in nurses being specialists in cardiothoracic nursing. Such over-specialisation seemed to influence the construing patterns of these nurses. They were generally more pessimistic about the patient's future and were certain of their professional judgements on different types of patients. They perceived patients as either "thoracic" or "cardiac" cases.

On the other hand, in Hospital B, the length of time a nurse had been in post was significant. Generally the nurses remained in the one area longer than those in Hospital A. This in turn also led to increasing specialisation which was reflected in the standard patterning of perceptions and construing of patients. Consequently, nurses who had been in post a long time were also pessimistic in their outlook about the future
life of the patient and were routinised in their expectations.

Whilst the key staffing variable was different in each Hospital, the resultant outcomes in terms of specialisation of care services and nurse-pessimism were similar. These findings may have implications for the education and development of staff. Specialisation, as a result of duration in one post, or as a result of multiple posts in different contexts but within one specialist field of nursing, has, according to the present study resulted in technically competent nurses. These nurses planned care and made nursing decisions on the basis of routines and the anticipated outcomes of particular surgical interventions. The social and psychological needs of individual patients were not taken into consideration during the decision-making about nursing care.

Certain patient characteristics were shown to influence the nurses' construings. Most notable was the type of surgery performed. This was especially true for the nurses from Hospital A, who perceived patients in terms of the surgical intervention carried out. Care in this setting was firmly organised around the medical model of diagnostic cure and the majority of nursing interventions were planned on a physiological basis. Whereas in
Hospital B, the type of surgery performed was less perceptually dominant. The nurses tended to perceive the patients more as persons.

Finally, the nature of care planning in each hospital was inclined to be reactive rather than proactive. The nurses tended to practise within a restricted range of skills and knowledge. The documentation of care and the relevance of recording the psychological aspects of care were not appreciated by the nurses. In the majority of cases the writing of care-plans was perceived as a chore.

8.2 Working Context

When the patterns of work organisation were examined it became apparent that the approach to care was reflected in the way the work was planned in each clinical situation. In each of the clinical environments, with the exception of the intensive care units, the work was organised according to a team approach to nursing. Specific members of the team were allocated routine duties to carry out as part of patient care. No one person had responsibility or accountability for the care of a specific patient. Consequently care was so routinised that it was not questioned. In Hospital A the number of Charge Nurses in each clinical area
resulted in the overall responsibility being so diffused that there was no proactive planning or patient-informed decision-making.

In Hospital B there were considerably fewer Charge Nurses, therefore the person with overall responsibility for management and care was easily identifiable. In these situations the routines of care were exactly as the nurse in charge directed. Professional autonomy was not afforded to first level nurses; their professional judgements conformed to the wishes of the Charge Nurse rather than the patients needs or the demands of the situation. This may have influenced the pattern of construing and may have accounted for the similarities in perception. The importance of authority figures and the influence of the Charge Nurse in affecting conformity requires investigation through further research but lies without the remit of this study.

In the intensive care units, care was just as mechanised and routinised but instead of team-work, patient allocation to individual nurses was the method of work organisation. In this context, the prioritising of decision-making about aspects of care were always mediated through medical staff.

The strength and value of routinisation of care in the
acute setting cannot be underestimated, because such an approach assists in the general running of an ever changing environment. The clinical setting is constantly changing with new patients arriving; others being discharged or transferred; medical prescriptions about care being given; and professional interventions for recovery being implemented.

The physiological environment of the surgical patient is also rapidly changing in an attempt to achieve homeostasis. In this situation therefore the routinisation and regularity of care is essential for life support, because dramatic and fatal changes can occur very quickly in patients whilst in intensive care units.

The problem in each context is about reconciling the ideals of the nursing process to the requirements and reality of practice. The nurses interviewed stated that routinisation of care took place but ideally all nursing care should be individualised for each patient. In this thesis, these two characteristics of nursing are not seen as contradictory. For the very routinisation and standardisation of care which is applied to all surgical patients is intended to ensure their physical well-being. However it is also desirable to personalise this care in order to promote the psychological well-being of the
patient. Care planning, according to this approach would involve nurses in different contexts focusing on different priorities for action.

8.3. **Personal Constructs**

The study has identified five types of perceptual constructs used by nurses when perceiving patients. These were typified as (a) social interaction, (b) professional judgement, (c) psychological care, (d) health progress and (e) personal constructs. In addition certain factors were identified which were shown to influence the nurses' construing patterns. The most notable amongst these was the type of surgery performed, although this variable was less statistically significant in Hospital B. Hospital A was the established cardiac centre of excellence, whereas Hospital B was the new expanding cardiac centre. As hospitals become more specialised and the throughput of patients intensifies, it is contended that, from the findings of this study, the quality of individualised patient care will diminish. It is postulated that the more specialised the type of surgery, the more specialised the nurses, the more routinised and less personalised the care.

(a). When the scores on social interaction constructs were analysed (for both data-sets) the thoracic patients with diagnoses of cancer were perceived generally as
being more difficult to relate to than cardiac patients. The cardiac patients were perceived as virtually self-caring, by the group of nurses interviewed. Though easier to relate to, these patients did not receive much relational care nor social interaction from nurses. Both groups of patients were heavily dependent on informal networks for information and support as has already been discussed.

From the nurses' perspective, the place of work was influential. Theatre and intensive care nurses, though concerned with social interaction were more limited in their application of these constructs due to the level of consciousness of the patient. Several nurses discussed the possibility of carrying out pre-operative visits to surgical patients and were interested in developing liaison with wards on a formal basis in order to relate more fully with patients. To a certain extent each of these care developments was carried out in Hospitals A and B. It is suggested that if this was strengthened then the nurses who work in these technical environments would develop interpersonally in ways which would contribute to patient care and professional development. The role of the nurse could expand beyond the operational and rather limited boundaries and patient care would be more holistic in approach and potentially personal in practice.
(b). The application of professional judgement constructs is more easily understood from all perspectives. The identification requires clarification, however, of which professional judgements are of relevance to specific nurses. The language used to express these constructs was the same for all nurses, yet their application in practice was markedly different in scale, in time perspective, and in the planning of subsequent nursing interventions. These distinctions are important for nurses to realise in specialist areas. For whilst, as has been shown, there are commonalities in nursing the specifics of care attributed to particular environments and stages of patient care have required that the nurse refined his or her perspective and priorities.

(c). With reference to those constructs classified as psychological care constructs the nurses recognised anxiety, independence/dependence, and clarification statements made by patients. They were unable, however, to accommodate some of these fully into care-plans. The concept of psychological care was very badly understood by the majority of nurses, and from the results of the patient interviews it became apparent that the psychological well-being of the patients was not being taken into consideration most of the time. Lip-service
was paid to the alleviation of anxiety, but in many instances this was reduced to formalised routines like the more physical aspects of care. For example, using patronising comments intended to reassure or instrumental touch techniques deployed, when affective touch would have been more appropriate.

Psychological aspects of nursing care have traditionally been taught as something separate and special (Altschul & Sinclair 1981). Consequently, attention has focused on the supposed problem-solving characteristics of specific psychological skills in particular situations. Within the discipline of psychology it takes years to learn, acquire and demonstrate these skills. Within nursing, the popular psychology which has been taught does not encourage self-reflection, self-awareness or self-control, but rather there is an assumption that certain techniques can be deployed to reassure or counsel patients. The constructs typified as psychological care ones actually focused on reassurance and anxiety-relieving techniques. The methods used to identify accurately and relieve such feeling-states were not part of the nurses' repertoire of skills or knowledge.

(d). Closely related to the other constructs were the health progress constructs. In many instances the
nurses had images and beliefs about certain diseases which were never discussed openly with patients, but certainly in this study, appeared to influence nursing interactions. Ideas such as enabling hope, spiritual well being, future lifestyle adjustments and quality of life were not included in the nurses' care-planning. These ideas were also not perceived by the nurses as being relevant to patients. Their perceptions tended to focus on the pessimistic and fatalistic outcomes. In practice, patients with a poor prognosis did not receive direct support from nurses. In their construing, however, the nurses commented on the degree of sympathy they felt towards these patients. Whilst many nurses were able to sympathise, very few could express this directly towards the patients concerned and even fewer were openly empathising with patients.

(e). The personal constructs developed by the nurses were indicative of the complex feeling states which seemed to affect their professional role. Openness about these feelings was rarely expressed by the majority of the nurses in the workplace. This may be as a result of the potential pain which might be experienced. The graduate nurses were the exception in both Hospital A and B. These nurses personally disclosed feeling states and openly empathised with patients. They demonstrated personal awareness and reflective skills which enabled
the constructive management of negative feelings. By internalising and isolating strong negative feelings, an individual's ability to sustain interest and social interaction becomes diminished over time. When there is no vent for such feelings, then the nurse may be reluctant to interact fully with specific patients and burnout may occur.

8.4. **The Perceived Role and Self-Image of the Nurse.**

One of the most significant explanations of the findings from the study was the effect of the working context on the construing patterns of the nurse. Generally, the sample nurses perceived themselves as technical experts and competent care givers within specific parameters. These parameters were set by the working context and each nurse interviewed had a definite understanding of his or her role in caring within that particular context.

From the data gathered, it can be concluded that there were central and marginal aspects of the role of the nurse. The working context was a key determinant of what was central and what was marginal. Nurses from the operating department, the surgical ward and the intensive care unit perceived their roles differently whilst caring for the same patient. Their roles were not functionally the same.
For theatre nurses, the central aspects of the role included preparation and planning for surgery, the assisting of medical staff during surgery and the safety of the patient whilst in the operating department. Marginal aspects of the role involved the pre-operative visiting of surgical patients as well as the post-operative follow-up visits to the ward or intensive care unit. This may seem self-explanatory but the emphasis in recent years has been to encourage and enable theatre nurses to become involved in nursing care beyond the confines of the operating department (NATN 1989, West 1992). In practice these educational and professional ideals of being more patient-centred and involved in holistic care were only partly incorporated into the role of the operating department nurses and the reality of care. Certain organisational and structural factors which the nurses found difficult to overcome, mitigated against the extension of the nursing role towards the model longitudinal nursing process.

The intensive care and recovery room nurses perceived their role similarly in terms of competence and specialism. Central to this role were the skills and knowledge required to monitor vital signs, assess the patient's well-being and respond to physiological changes with alacrity to pre-empt serious complications arising. The marginal aspects of the role were the more long-term
assessment and evaluation of recovery and health. The planning of care was for the duration of time spent in the physical environment of the intensive care unit or recovery room. The nurses did not specify the longer term goals nor were they of concern. Their roles were circumscribed by the working context and the demands of the situation.

The concept of patient advocacy was not introduced by any nurses in the study. The principles which constitute the concept were also not mentioned. Clearly the nurses did not perceive themselves as patient advocates. In situations where for a variety of reasons the patient cannot articulate events for him/herself, advocacy is part of the nurse's role. Intensive care units, and operating departments are areas where patients are vulnerable, unconscious or semi-conscious and may require an advocate. In this instance the advocate role of the nurse was not established. The medical staff were being left with the roles of advocate and clinician and the nurses were practising according to medical directives most of the time.

The ward-based nurses generally perceived their role in terms of preparing patients for surgery and discharge. Central to this role was the physical care and well-being of the patient. Social interaction, support and
effective counselling were marginal and not regularly practised by the ward nurses.

Furthermore, the role of the nurse as general informant was not expressed. From the patient interviews it was apparent that they expected nurses to provide very little information on medical or health matters. In addition they neither expected the nurse to provide domestic information pertaining to the hospital, nor health progress information in order to assist in the planning of their long-term recovery. The concept of patient education was restricted and tended to decry past practices and lifestyle rather than promote well-being.

What has emerged from this study are differences between the nurses who were studied and the researcher in their respective perceptions about the central features of the nursing role. From the researcher's point of view, communicative competence and psychological care are essential components of nursing care in any working environment. These factors are necessary not only for the nurse/patient relationship but also for inter- and intra-professional relationships. Effective communication strategies and an understanding of the psychodynamics of interpersonal relationships enable the nurse to care for patients personally. These skills also enable nurses to interact with nursing, and other health-
care, colleagues in a more meaningful and co-equal way.
The lack of recognition of the inter-relatedness of
nursing and other health professional roles was apparent
in both the nurses' and patients' understandings. The
complementarity of roles and mutual concerns of doctors,
nurses, and other allied professionals, requires to be
developed in clinical practice and investigated through
further multi-disciplinary research.

Fundamental to the development of a therapeutic
relationship is the build-up of confidence and trust.
This is often expressed verbally but can be inferred from
actions and non-verbal cues. In an acute setting, such
as intensive care and the operating department, the
patient's trust in the nurse is partly determined by the
technical competence of the nurse. The communicative
competence, namely of explaining to the individual
conscious patient what is about to occur, may be
perceived as of secondary importance by the nurse in this
setting. However the effective use of communication
skills are necessary and important in all aspects of
nursing practice. The use of various communication
techniques not only helps the patient focus on feelings
and thoughts, but also enables the individual nurse to
explore the possible solutions to problems.
Fundamentally too, both parties are enabled to develop
trust.
As in nurse/patient relationships, the communicative competence of nurses with peers and professional colleagues is paramount not only for inter-professional trust and respect, but also for efficient team work in the meeting of the objectives at hand. To this end the commonalities in the construing of events and people are important. It is such patterning which ensures that all relevant health professionals are operating within the same frame of reference.

In the process of nursing, factual observation, personal perception and the social construction of events are inter-dependent. The observation is a factual report of events whereas perception is the personal interpretation of observations and construction is the understanding of perceptions based on previous knowledge and experience. The ability to construe the patient and the situation accurately is related to the observation of actual external phenomena, the internalisation of these phenomena, and the subsequent successful prediction of outcomes.

The findings of the present study indicated that when nurses were caring for patients, there were common constructions and perceptions of nursing problems, patient's problems and expected outcomes. The reality of
these constructions had meaning for the nursing staff, in each clinical context, however, it was frequently not shared by patients. Knowledge about patients, for the majority of nurses, was focused around somatic and physiological problems which were inherently social.

For nursing care to be individualised and personalised, reality must be shared between nurse and patient. This ideal is especially important in relation to health status and outcomes of care. In this study only a few perceptual realities were shared. At a psychological level, the personal coping strategies and adaptative possibilities of patients were not sufficiently known to be incorporated into nursing care.

Good interpersonal perceptions should enhance accurate nursing observation. It is important that when the nurse is asked to observe the patient, conscious consideration may be given to the process. For observation is a planned activity where data are collected and recorded regularly in the acute clinical context. The shift from the actual observation of many events to the perceiving and construing of all those events together provides the basis for a thoroughly therapeutic approach to patient care. The shift also indicates acquisition of care expertise (Benner 1984).
The findings of the research have shown that the nurses' self-images were focused on what the nurse actually did in a particular working context without losing face, authority, or professional competence. Nurses working in the recovery room, intensive care unit, and surgical ward ignored issues such as impending death, the handling of difficult questions, or social and family matters. Such issues challenged the practical competency of the nurse and appeared to be counter-productive to the operational self-image. Those images that did not enhance the perceived job were overlooked. Indeed only where it was perceived as being "strong and right" to be patient-orientated (e.g. by the graduate nurses) did full empathic understanding take place. The few graduate nurses in the study were more personally aware and socially accomplished in their relations with other colleagues and patients.

To conclude, the self-image and role of the specialised nurse did limit her/his capability to relate to patients, relatives and colleagues. The results obtained from both data-sets indicated that those nurses who were more experienced, specialised and competent, actually became more removed from socially meaningful interaction with patients. Their nursing concerns focused on technical and physiological aspects of care primarily. These nurses valued their own role in terms of technical and
not social skills. This was not related to one particular working environment but was apparent across the contexts. The initial type of RGN course completed was the significant factor in explaining why this was so. The graduate nurses were both technically and socially competent. The number of graduates in this study was very small, therefore, only tentative conclusions may be reached pertaining to the role of the graduate nurse. Further research into the perceptions of graduate nurses could generate more data and investigate this finding further.

8.5. The Construed Needs of the Patient

In order to explore the construed needs of the patient it is first necessary to identify the psychological factors inherent in the situation which were not identified by the nursing staff interviewed.

The patient role in hospital was one of a passive recipient waiting for things to happen. The mediation of information relating to events occurred through informal networks rather than through professional channels. Other patients and family members appeared to be the main psychological and informational support mechanisms for patients in cardiothoracic units. Whilst these were effective for most of the time studied, the demands that patient-peers or family members can put on one another
can reach crisis point, as illustrated in the case study involving the 41 year old school teacher in Hospital A.

For nurses to recognise the subjective burden placed on patients by other patients or family, requires the development of trusting relationships and an insight into the psychology of the other. The danger of nurses failing to recognise this burden was reflected in the findings in so far as some patients became the lay carers of others to the detriment of their own personal health and well-being.

The stress and anxiety experienced by the patients was evident and has been illustrated in the patient interview data. It was observed that when a similar situation of physical change arose marked individual differences in emotional reactions, attitudes and overt behaviour took place. This response difference may be due to certain constitutional factors or formative experiences within the individual. In the case of pre-operative patients specific situational factors and general changes in the environment may play an important role in increasing or decreasing the level of stress and anxiety experienced. Janis (1974) argues that exposure to a threat of body damage (as in the case of an impending surgical operation) makes the individual more susceptible to stress experiences.
From the interviews carried out, it appeared that several patients felt apprehensive during the post-operative period. They expressed a lack of confidence about fully recovering from the operation and many were preoccupied with memories of distressing or frightening events. Although the patients expressed these anxieties to the researcher, their attitude towards the hospital staff tended to be extremely positive in that they frequently expressed gratitude or admiration and rarely criticised.

In general, the patients did not make particularly heavy demands on nursing and medical staff but they did seek a lot of social attention from them which was not readily forthcoming. The patients' concerns and anxieties, especially with regard to recovery and progress, were perceived by most of the nursing staff. Yet the wish to initiate support measures and to inform patients about their progress towards health was not apparent. Rather, in the balance of recovery expectations, the majority of patients complied totally with the demands made of them.

The process of post-operative recovery was characterised by friendly and co-operative relationships with doctors and nurses; mildly disruptive incidents were only occasional (eg the bus-driver in Hospital A and the traveller in Hospital B). When these apparent friendly
and co-operative relationships were analysed in more
detail, it transpired that the levels of anxiety and
concern of these patients were neither being expressed by
themselves nor intuited by the nurses.

Janis (1974) argues that surgical patients with a high
level of pre-operative anxiety make repeated efforts to
seek reassurance from nursing staff. He states, however,
that the reassurance which is given is often short-lived
as certain patients often dwelt on the possibility of
what will go wrong. Although surgical patients sought
reassurance, in the present study, they often entered
the post-operative phase without sufficiently positive
ideas about the surgery which had been performed and the
outcomes to be expected. Unless the nursing staff were
especially adept at passing on information to patients,
effective defenses, to reduce anxiety and encourage
self-control, did not adequately develop post-
operatively. In the present study the nurses perceived
anxiety-states, but were not capable enough to act to
alleviate feelings in any meaningful way. The
communication between nurse and patient focused on
somatics as this was the key area of competence for the
majority of nurses. Concerns about bodily functions and
biological systems were openly communicated to the
patient but social concerns, feeling states, and issues
of quality of life were not.
The focus of organising care around activities of living encouraged the nurses to prioritise care according to somatic needs regardless of the working context. The model around which care was planned in each context was Roper, Logan and Tierney's Activities of Living (1980) which is primarily physiological in concept.

The locus of care identified in this study was in two parts: breathing, eating, eliminating, controlling body temperature and mobilising which all reflected the medical concerns and directives were given priority by the majority of nurses. Whereas communicating, expressing sexuality, sleeping, and dying, although firmly grounded in social interaction and psychological coping were actually managed physiologically in practice. The psychological aspects of these functions were rarely considered by the nurses. The biological and physiological complexity of the model with its over 40 item prompt list for nurses has resulted in the salience and prominence of these aspects of care. The social and psychological needs of patients were generally ignored and were not incorporated into nursing actions nor care-planning.

The efforts which were made to address the psychological and social needs of the patients were frequently divorced
from the model of nursing used and the care-plans developed. In Hospital A a coffee club was set up to provide a forum for patient self-help and also to disseminate specialist nursing knowledge. This club catered for cardiac patients only. From some patients' accounts the club was helpful in enabling them to obtain information by talking with previous patients about their impending surgery and the nature of recovery. This club was perceived by the nursing staff as providing the forum for sharing ALL information consequently reinforcement or clarification did not take place routinely. In Hospital B the informing of patients was perceived primarily as the responsibility of the medical staff and consequently the nursing staff did not contribute information independently to patients.

The psychological support structures were less evident for those patients undergoing major thoracic surgery for cancer than for the cardiac patients. From the patient interviews, it was apparent that many patients experienced feelings of inadequacy or anger towards certain aspects of treatment. The dependence forced upon patients by the patient role caused frustration for some.

In care of the terminally ill the nurse's ability to enable the patient to recognise his or her own feelings and goals for the future is necessary. Time is
significant to these patients probably as their life perspective will be curtailed. Consequently, they need an outlet in which they can discuss stressful and personal topics without the impedance of family responsibilities, authority relationships or normal group developments. This was not being offered in either hospital setting.

The question now arises as to whether the nurse in her role and relationship with individual patients can strengthen the informal support systems which actually exist and build these into the planned care of patients. Positive involvement of other patients and family members as part of the structured hospital care system has been well documented in the literature (Parsell & Tagliareni 1974 and Ferlic, Colman and Kennedy 1979). Each of these studies emphasises the benefits of shared patient experiences and conclude that in any risk benefit analysis the benefits outweigh any potential difficulties so long as the group facilitators are skilled and knowledgeable.
8.6. **Care-Planning**

In all clinical situations the representational form for the nursing process was the care-plan. In this study several nurses from the elicitation stage and the two parts of the Main Study commented on the impersonal task-orientation of care plans rather than the patient focus. In certain cases the care plans were so standardised that they were constructed prior to the patient coming into the ward.

In these cases, the nurses were planning the care based on past experiences and construing of physiological needs. Consequently the anticipated care was only valid in stereotypical rather than individualised or personalised terms. The maintenance of biological functioning and the quest for physiological homeostasis were inferred by the nurses from the proposed surgery rather than by an assessment of the individual patient.

The term 'individualised care' was used by several nurses. This tended to mean carrying out specific physical aspects of care for each patient. The concept of physical care was well understood by all nurses whether working in theatre or the ward. In each context there were slight differences of interpretation.
Basically all nurses understood the concept included the monitoring of vital signs and assisting the patient with those physical functions that he/she could not perform independently. The patient was not consulted nor informed about many of these activities and merely complied as a passive recipient.

Some of the nurses attributed their inability to carry out some of the more interpersonal or psychological aspects of care to specific structural factors. For example, the throughput of patients was important to the nurses in Hospital A and staff shortages were mentioned as justifying patterns of care in Hospital B.

Roper, Logan and Tierney's "activities of living" (1980) has become the orthodox model around which to plan and document nursing care in each hospital. This has constrained nursing practice. The model emphasises the physiological aspects of nursing and does not easily enable the integration of psychological and social aspects of care. It was arresting that the nursing staff perceived relational aspects of care as distinct and separate rather than integral to all nurse/patient interactions and nursing interventions. It is suggested that the quality of the nurse/patient relationship would improve and both parties would benefit if these two aspects of caring were inter-related in practice.
To a certain extent, the planning of care around activities of living encourages this functionalist approach. Furthermore, the responsibilities of the nurse towards the patient are relatively demarcated using this model for care planning. Unfortunately, the more interactive and interpersonal aspects of care are disregarded within this model and in practice. As suggested earlier the physiological focus of activities of living outlines the nurse's responsibilities in assisting the patient with specific functions. Such an approach to nursing does not elaborate on the process of interaction nor value the development of a relationship as integral parts of nursing action and care.

The conclusions of the study will be presented in the final chapter in terms of:
- the value of the methodology used to the study of active nursing.
- social cognition, decision-making and the nursing process.
- psychological aspects of patient care.
- personal construct theory and the nursing process.
- the specialist role of the nurse.
- the nursing process.

In addition specific recommendations for clinical practice, education and further research will be presented.
CHAPTER 9

Conclusion and Recommendations
9.0 **Introduction**

The conclusions reached in this study of nurses' perceptions of patients have particular relevance for various sections of the nursing profession. The chapter is organised in such a way as to enable the discursive nature of the conclusions to be addressed under the following headings:

- preliminary reflections upon the methodology.
- social cognition, decision-making and the nursing process.
- psychological aspects of patient care.
- personal construct theory the nursing process.
- the specialist role of the nurse
- the nursing process

The chapter concludes with specific recommendations for:

- clinical practice.
- education
- further research.
9.1 Preliminary Reflections upon the Methodology

This thesis has been concerned with the nursing process and has contended that nursing is essentially a social and therapeutic activity involving the meaningful caring of patients. From this standpoint it has been essential to explore what the present author considers to be the key analytical concept in understanding the nursing process, namely, perception, and in particular nurses' perceptions, as they care for patients in cardiothoracic settings.

Working within this social cognitive framework has been demanding both for the researcher and for those who participated. The methodological gains have been immense as no other investigation into acute cardiothoracic nursing, to date, has identified nurses' perceptions of real patients requiring intense care.

The psychological processes of interest to the investigator are usually unavailable to introspection. Until this study inferences about the nature of the nurse/patient relationship have been derived from simulations. The research design adopted by the author has enabled the analysis of nursing perceptions, such as constructions about oneself and others, and the deployment of professional knowledge to be examined in a caring context.

Every day, nurses in the operating department, the surgical ward and the intensive care unit make numerous complex judgements about other individuals e.g. patients. The conditions of judgement may not be most conducive to accuracy or thoroughness. In the nursing process if the nurses were to be thorough and comprehensive in all decision-making, as the normative model suggests, then very little action would take place.

Therefore to use March and Simon's (1958) distinction of types of decision makers, the perceiver in a social interaction is often a "satisficer" rather than an "optimizer" who reaches the best possible inferences and decisions.

The results obtained in this study indicate that the majority of nurses are "satisficers" who elicit sufficient information to deal with the somatics of care. A few nurses, most notably the graduate nurses are optimizers who are actively seeking information of somatological, psychological and social well-being in order to care for patients.
The perceptual constructs identified indicated that there were not only common nursing constructs but also that these were related to the levels of action of the nurse. When considering the levels of nursing action, that is the somatic, the psychological and the social, then it is concluded that the nurse must be educated to make decisions at these levels and to integrate the knowledge gained when caring for the patient. By doing so, the routines of care, which are vital in certain clinical contexts, can be maintained yet personalised and therefore become more meaningful to the patient.

Tversky and Kahneman (1974), working within the field of social cognition define the decision-making process in terms of heuristic reasoning. The individual endeavours to reduce complex problem-solving to more simple judgemental operations. Within nursing the individual nurse deploys this approach regularly. Rather than tackle the complexity of the relational goals between the patient and him or herself the nurse reduces decision-making parameters and deals with the moment in terms of representativeness, association and experience. These concepts are integral to decision-making, the mechanics of which have been exemplified through the application of personal constructs.

The practice of heuristic reasoning is normal in the
nursing process. For whilst the nursing process has been analysed as a decision-making process within the normative tradition, the actuality of caring for patients is much more pragmatic and heuristic than the four stages of assessment, planning, implementation and evaluation allow for.

The results obtained indicated that different types of patients were perceived by nurses and that if a patient was receiving cardiac surgery then his or her needs would be representative of all cardiac patients to the majority of nurses. The graduate nurses were more discriminating.

Association of ideas and knowledge was also apparent especially in connection with the 'psychological care' of the patients. Certain psychological states were construed or not construed by the nurses by virtue of a particular diagnosis, or routines of care rather than by an assessment of the coping abilities of the individual.

Previous nursing experience was important in construing situations and in making judgements about care. The pattern of construing indicated that the nurses were more certain of patient needs as based on their personal experience of other patients. In addition
other nurses attributed competence to length of experience. In actual practice, the shorter the experience the more likely the nurse was to engage in a more personalised manner with the patient. These findings raise some doubts about the value of specialisation in cardio-thoracic nursing over a long stretch of time.

By examining the psychology of the nursing process in cardiothoracic settings the author has described the commonalities of the construing processes involved in caring, and identified the socially and statistically significant factors which influence perception and the delivery of nursing care in particular clinical settings.

9.3 Psychological Aspects of Patient Care
It has been suggested that the majority of individuals are visually minded and only use other senses and information sources to flesh out the perceptions which are being built up from events around them. Therefore, it is concluded that perceptions need not be strictly identical with actuality. Each individual is capable of reconstruing and rearranging the outside world to suit his or herself or pattern of life. It has been shown in this study that perception in particular environments is not idiosyncratic. Perception, per
se, is more than a simple physical phenomenon; it is a psychological process from which several conclusions about the nature of relationships and the dynamics of the inner-self can be drawn.

If Adler's analysis of the concept of "social feeling" (1928) is applied to the findings in this study of nursing, then the social unity of the nursing workforce is strong. The sick role of patients involves transferring a certain amount of control to the nurse and/or the doctor. Having major surgery may illustrate the situation where the individual may be totally helpless some of the time but not hopeless.

The identification of common nursing goals and the acceptance of current care delivery in the cardiothoracic settings studied confirm the social unity of the nursing workforce. The commonalities of construing and the dominant patterns of care are, it is concluded, indicators of the power of nursing. Furthermore the passivity of the patient role and the contradistinctions in patients' understanding and nurses' construings also indicates the imbalance of power in the relationship.
As has been shown psychological aspects of nursing care were not fully understood by the nurses. Concepts such as information giving, fear and anxiety were recognised by the nurses but without any in depth appreciation of the psychodynamics involved. If one of the aims of nursing acutely-ill patients is to maximise health and well-being the nurse requires to have a knowledge of the psychology of control.

If Thompson's (1981) aspects of control are considered alongside the data obtained from the nurses' construings and the patient interviews then the analysis can be developed further.

**Informational control** involves the individual learning about adverse or fearful experiences in order to manage a situation which may be an unique experience. In the case of the cardiothoracic patient this includes pre-operative information giving, consultation and explanation about the nature of the surgery and the expected outcomes. In order for the patient to retain some control the nurse must share information and enable the patient to consciously manage the situation. Whilst the nurses involved in the study recognised the importance of this, there appeared to be patient concerns about the detail and quality of information available to them.
Behavioural control requires that the individual acts directly on a situation. This involves the patient choosing to have surgery and being part of the care process. The nurses must ensure where appropriate that the patient is an active participant in care. The research findings, from the clinical settings investigated, indicated that the patient was effectively a passive recipient of care and that behavioural control was exercised by the nurse in managing the situation pre- and post-operatively.

Cognitive control requires that the individual thinks differently about a particular situation. This process enables the individual to cope with a new self-image. In this study it appeared that health promotion, active counselling and follow-up support, (each of which would enable the patient to think differently about the situation) were not perceived as priorities by the majority of nurses.

Retrospective control involves the individual in accepting that he or she could have controlled the adversive situation in the past (e.g. the need for cardiothoracic surgery) and presumably may be able to do so in the future. The role of the nurse in enabling this understanding involves health promotion,
reassessment of past events and an active promotion of self-esteem. The passivity and the rapid throughput of patients in the acute settings meant that these issues were not explored during the actual nursing process in practice.

These four aspects of control are interrelated psychologically and are part of the continuum of the surgical experience. These ideas of control, however, raise a few cautionary points which require brief consideration. Whilst there are many psychological ways of trying to achieve control there are also personal mechanisms involved which may mean that the individual patient for a variety of reasons will be content to relinquish control to others.

One patient in this study (the farmer Hospital B) was adamant in his belief that certain information was for the benefit of health professionals only. He did not require to know about it as he had no way of assessing the relevance or importance of certain facts. He did not perceive how this information could be used appropriately by him.

This highlighted a very interesting question, that is what do patients want to know and how much control do they wish whilst in hospital? The current trend in
health service management has been to provide a wide range of information which may or may not be meaningful to the individual. The present policy of government of advocating patient choice and provision of patient charters in the health service appears laudable but is based on a consumer reception of health care which may devalue professional decision-making to some extent. Many patients may be like the farmer and be content with professional boundaries and decision making without too much consultation. Others will actively seek information. In nursing it is essential to differentiate patients and plan personalised patient care which utilises various aspects of psychological support.

When providing information for patients the health professional must consider whether the patient has enough knowledge to make an informed choice. Also whether by raising certain options the individual will experience more stress or anxiety and begin to lose control rather than retain it.

9.4 Personal Construct Theory and the Nursing Process
The conceptual basis of the study has been Personal Construct Theory (Kelly 1955). Such an approach has enabled the process of nursing to be examined from the perspective of the patient and the nurse.
The constructs, elicited and tested, as suggested by Kelly (1955) form a system which is inter-related yet distinctive. For example if some of the more relevant corollaries (Kelly 1955) are considered in conjunction with the results presented then it can be concluded that certain perceptual construings are essential to, and operational during the nursing process. Kelly's construction corollary states that a person anticipates events by construing their replication. The detection of certain recurring themes was true not only for individual nurses but also for nurses who shared specific attributes. The sameness of certain patients in the case of nursing also helped to differentiate from other patients.

The dichotomy corollary states that a person's construct system consists of a finite number of dichotomous constructs. In this study the elicitation of constructs indicated that not only is this the case for an individual nurse but it was also demonstrated for group of surgical nurses. This finding is of significance and was tested in the main study through the application of the constructs to other patients. Thus confirming the perceptual patterning of professional construing within cardiothoracic nursing. The application of the twenty-five constructs and contrasts identified to other specialities in nursing
requires to be tested in further research.

The range corollary states that each construct is useful in anticipating a finite range of events only. In the elicitation stage the range referred to was the particular patients in the ward at the time of study. This study and others (Bieri 1955, Duck 1973 and 1979) have shown, however, that the range of constructs available is not so restrictive as Kelly originally suggested. The nurses in the validation and Main Study had no difficulty applying the constructs. It must be stated, however, that only a few of the constructs elicited and tested here, would apply in non-nursing relationships. So if the definition of range is relational then it is concluded that there will be a wider and less predictive set of constructs depending on the nature of the relationship.

The organisation corollary states that a single construct rarely stands by itself but is usually deployed together with other patterned constructs. This was clearly the case in the present study as construct types were identified. Also from an analysis of the scores on the construing grids it was shown that certain scores on a particular construct corresponded to a particular score on another construct.
In this thesis, the organisation corollary was important as the construct types identified were inter-related. By recognising this inter-relationship it is possible to identify areas for personal and professional development within the individual nurse.

The choice corollary states that an individual will choose an appropriate construct which allows for the full elaboration of his/her own construct system. This was exemplified in the application of the supplied constructs and the clarification and elaboration of these constructs by individual nurses, thereby producing a consistent picture. The variation in consistency for nurses was attributed to certain factors such as the working context. The findings indicated that the nurses are limited by the working context in their choice and application of constructs.

The individuality corollary states that persons differ from each other in the construction of events. In this thesis and in many other studies (Adams-Webber & Manusco 1983) this was clearly not the case. The commonality of construing was very strong. If the individual's construing system was truly unique then it would be very difficult to relate to others at all. On the other hand, Kelly's sociality corollary states that an individual construes the construction
processes of another and enters into a social role accordingly. For the nurse/patient relationship this was important. The data indicated that nurses identified specific role responsibilities and concerns of patients but actively chose to adopt a particular role as a result of their construings.

When the sociality and commonality corollaries are considered together and applied to nurses working together then it helps to explain the similarity in construing and the apparent ease of communication between nurses. Within the nurses construing system there was a concept of the patient role which has detrimentally affected the nurse's ability to empathise and understand the perspective of the other. The limited construction of the patient role meant that any deviation from that role resulted in conflict within the nurse and the partial alienation of the patient.

9.5 The Specialist Role of the Nurse.

The results obtained in the current thesis are congruent with the Benner thesis (1984), in that length of time in a particular post influenced construing patterns and technical competency. The nurses who had been in post for a few years were technically very competent but were not expert in interpersonal relationships. Benner's understanding of the
dynamics moving from novice to expert takes the analysis of nursing so far but not to the point of practical satisfaction. In terms of personalised care, empathy and personal fulfilment longstanding expertise does not remain an advantage. This may not only be due to the patient care role but also to extraneous factors or pressures such as available resources, limitations of role development and the pressures of mentorship or role modeling. In addition the findings here indicate that cynicisation and routinisation along with the built-in limitations of the role make the nurse a technical expert but by becoming so she or he has lost some of the impetus required for dynamic interpersonal nursing.

The study has raised doubts about the value of specialisation in cardiothoracic nursing. Cardiothoracic nursing is a demanding multifaceted area of care which requires intensive somatic, social and psychological knowledge and skills. Because of the combined heart and chest focus, cardiothoracic nursing often encompasses aspects of oncology, surgery, and medical therapeutics which in themselves are considered specialist areas.

The research has indicated that specialisation may not always be in the best interests of either the
individual nurse or patient. From the results it has been demonstrated that the psychological and social quality of patient care diminished as the duration and degree on nurse of specialisation increased (Chapter 5).

9.6 **The Nursing Process**

The nursing process is a dynamic and differentiated activity which is influenced by many social and professional factors. For example, the working environment of the nurse, the previous career of the nurse, the surgery performed on the patient, or the professional, educational qualifications of the nurse.

Roper, Logan and Tierney's (1980) model of nursing assumes that the nurse always knows what he or she is doing, and where he or she is going in patient relationships. The findings from this study indicate that the confusions, indecisions, hopes, and anxieties which influence relationships generally affect the execution of the nursing process in respect of cardiothoracic patients. The indiscriminate use of the Roper, Logan and Tierney (1980) model in the cardiothoracic nursing process has contributed to the routinisation, standardisation and depersonalisation of the delivery of nursing care.
The commonalities of perceptions identified in this study indicate that there are powerful professional bonds operating between nurses in a particular clinical contexts. By understanding the social and psychological dynamics of the nurse/patient relationship researchers, educators and clinicians can develop the nursing process in a more meaningful and holistic way.

The reconstruction of nursing reality has been achieved in this thesis. What is required now is the mediation of the process of nursing at clinical and educational levels in order to empower the nurse to deliver optimal care and to develop meaningful and harmonious interpersonal relationships with patients.
9.7 RECOMMENDATIONS

a. Clinical practice

It is recommended that:-

(i) nursing care goals are specified in terms of patient health outcomes, the actions of the nurse, the stage of hospitalisation and the clinical context.

(ii) when the nurse plans care he or she takes into consideration only those goals which can be realistically achieved in the particular clinical setting.

(iii) the planning of personalised patient care is based on an assessment of the following:-

- physiological care requirements.
- psychological care requirements.
- social interactive dynamics.
- professional nursing judgements appropriate to the clinical context.
- the health progress understanding of the patient.
- the personal feelings of the nurse towards a particular patient.

(iv) the nursing staff in any situation formalise a more patient-centred and self-aware approach
to nursing care. Thereby not only enabling the patient to become an active participant in care but also empowering the nurse to act autonomously.

(v) Patient peer-support groups are proactively planned for those surgical patients who wish to participate. The overall aims of such a programme would be to ensure that the patient is an active participant in care; has adequate knowledge to make informed judgements; has a sense of control over his or her life; realises that having a particular disease or disorder does not necessarily mean the immediate end of life as he or she knew it but may actually involve him or her in an improved emotional quality of life.

(vi) The clinical nurse manager determines what the workload, patient turnover and staff ratios are that make for satisfactory care from the point of view of both the patient and the nurse. Thereby ensuring that the optimal conditions for, and outcomes of, patient care can be observed, maintained and ensured.
b. Education

It is recommended that:

(i) self awareness, and life-skills training become part of the professional development of nurses in order that the nurse can appreciate the full potential of her/his role in relation to the emotional needs of the patient.

(ii) clinically-based Advanced Professional Studies programmes incorporate more meaningful and in-depth aspects of psychology. Especially those topics relating to psychological understandings of control and decision-making.

(iii) clinically-based education and counselling support be available for nurses who are interested in developing a group counselling programme for self-selected patients.
c. **Further Research**

It is recommended that:

(i) a full replication of the present study is carried out in order to extend and test the findings of this research in other acute care settings.

(ii) the methodology which has been adopted here is extended into other care settings, such as community, psychiatry, or mental handicap nursing in order to identify the commonalities of perception and strong professional bonds, should they exist in these contexts. There would also be much to be gained by pursuing these ideas amongst a sample of nurse educators.

(iii) an investigation which compares the construings of doctors, nurses and patients with regard to care expectations in the acute sector be conducted.

(iv) the informal patient network and its' relationship to the perceived influence and social power of medical experts be examined.
(v) the demand and value of specialisation amongst the nursing workforce be examined, particularly in relationship to the psychological needs of patients.

(vi) the relationship between the educational background of the nurse and his or her approach to patient care be further investigated.
REFERENCE BIBLIOGRAPHY


Davis BD (1983b) *Perceptions by Nurses Doctors and Physiotherapists of Information Giving*, For SOHHD. Nursing Research Unit, University of Edinburgh.


Davis BD (1984a) Study of Patient's Fears and Worries, For SOHHD. Nursing Research Unit, University of Edinburgh.


Ferlic N, Colman A & Kennedy B J (1979) Group Counselling in Adult Patients with Advanced Cancer, Cancer, 4 3 760-6.


Goldstone LA, Ball JA & Collier MM (1985) Monitor: An Index of Quality of Nursing Care for Acute Medical and Surgical Wards, Polytechnic Products Ltd Newcastle-upon-Tyne.


Hall L (1955) Quality of Nursing Care, Public Health News, New Jersey State Department of Health, June.


Hayward J (1975) Information a Prescription against Pain, RCN, London.


Highley BL & Norris CM (1957) When a Student Dislikes a Patient, American Journal of Nursing, 9 1163-1166.


Jellinek RC (1974) Methodology for Monitoring Quality of Nursing Care, US Department of Health Education & Welfare. Public Health Service, Health Resources Administration Bureau of Health Manpower; Division of Nursing, Bethesda Maryland USA.


Meyer GR (1958) The Attitude of Student Nurses towards Patient Contact and Their Images and Preferences for Four Nursing Specialities, Nursing Research, Oct. 126-130.


Meyer GR & Hoffman MJ (1964) Nurses' Inner Values and their Behaviour at Work, Nursing Research, Summer 244-249.
Miller A (1979) The Role of the Nurse: Nurses Attitudes towards their Patients, Nursing Times, 75 45 1929-1933.


Peplau M (1952) Interpersonal Relations in Nursing, Putnams, New York.


RCN (1979) Implementing the Nursing Process, RCN, London.


Ritvo M (1963) Who are the Good and Bad Patients? The Modern Hospital, 100 79-81.

Rogers CA (1951) Client-Centred Therapy, Houghton-Miflin, Boston.


Roth JA (1963a) Timetables, Bobbs-Merrill, Indianapolis.

Roth JA (1963b) Information and the Control of Treatment in Tuberculosis Hospitals, IN Friedson E (Ed) The Hospital in Modern Society, Free Press, Glencoe, Illinois.


Schwartz DR (1958) Unco-operative Patients, American Journal of Nursing, 58 75-77.


Vigeurs RF (1959) Be Kind to Impossible Patients - They're Scared, The Modern Hospital, 92 1 70.


Viney LL & Westbrook MT (1982) Patterns of Anxiety in the Chronically Ill, British Journal of Medical Psychology, 5 5 87-95.


West BJM (1986b) Nurses' attitudes to the Nursing Process, Unpublished Grampian Health Board Report.


Williams T & Williams M (1959) The Socialisation of the Student Nurse, Nursing Research, 8 18-25.


Wolff HG (1953) Changes in the Vulnerability of Tissue; an Aspect of Man's Response to Threat, National Institute of Health, Washington, DC.


SUPPLEMENTARY BIBLIOGRAPHY
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Dominian J & Dobson M (1969) A Study of Patients' Psychological Attitudes to the Coronary Care Unit, British Medical Journal, 4 7 95.


Johnson DE (1972) Approaches to the Study of Nursing Questions and the Development of Nursing Science: Effects of Structuring Patients Expectations on their Reactions to Threatening Events. Nursing Research, 12 1 499-504.


APPENDICES
APPENDIX 1

PATIENT POST-OPERATIVE INTERVIEW SCHEDULE

1. Hospital: 1 Elicitation...........
   2 Validation..............
   3 Hospital A............
   4 Hospital B............

2. Ward: ................

3. Code Number.............

4. Sex............... 

5. Age:......... years 

6. Occupation:................................................................. 

7. Synopsis of pre-operative nursing assessment: 

8. Synopsis of post-op care:
Appendix 1 continued

POST-OPERATIVE INTERVIEW SCHEDULE

1. (a) What name do you like to be called by whilst in Hospital?
    (b) In hospital does everyone call you by that name?

2. (a) How many of the staff do you know by name?
    (b) How did you come to know their names?

3. (a) Please tell me what happened to you when you first arrived on the ward?

4. How did you find out when certain events happen on the ward for example:
    (a) When meals are served?
    (b) Visiting is allowed?
    (c) Where to put your personal belongings?
    (d) When the nurses' shifts change over?
    (e) When the newspapers are delivered?

5. How did you discover the layout of the ward for example where
    (a) the telephone is situated?
    (b) the toilets are situated?
    (c) the dayroom is situated?
6. (a) What did you expect to happen to you when you were taken into the operating theatre?
   (b) How did you know what to expect?

7. (a) In the last few days have you had any pain?
      If answer is yes then continued with prompts below.
      (b) Who did you tell about it?
      (c) Why did you choose that person?
      (d) Was something done to help you feel better?

8. (a) In the last few days have you had any nausea or vomiting?
      If the answer is yes continue with prompts below.
      (b) Who did you tell about it?
      (c) Why did you choose that person?
      (d) Was something done to help you feel better?

9. (a) Since you've been in Hospital have you slept well?
   (b) Did you tell anyone how well/badly you slept?
   (c) Why you chose that person?
If patient has not been sleeping continue with prompt below.

(d) Was something done to help you sleep?

10. (a) Please tell me what you have needed help with in the last two days?

If patient says that help was needed continue with prompt below.

(b) Who was available when you needed help with these things?

If patient has any infusions, monitoring devices, catheters etc. then ask the following questions.

11. (a) I notice that you have some special equipment. Can you tell me what it is for and why you need it?

12. (a) How do you manage to get out of bed with all of this?

(b) How did you learn to do this?

13. (a) How do you feel you get on with the nurses?

14. (a) When you want to talk or ask any questions is there always a member of staff available?

(b) Please tell me how you obtain their attention and engage their interest?
15. (a) When the doctors and nurses come round to see you in a group, are you included in their conversation?

(b) Please tell me what they said the last time they came around?

16. (a) Since you've been in Hospital have you had any special tests carried out?

If the answer is yes then continue with prompts below.

(b) Were they explained to you before they were done?

(c) Who explained them to you? OR Would you have liked them explained to you?

(d) Were the results of the tests explained to you?

(e) Who explained them to you?

(f) Please tell me about the results?

17. (a) Do you feel you've been given enough information about your own illness, progress, recovery?

(b) Please tell me sWho has given you this information?

(c) Please tell me what do you understand from this information?
18. (a) How do you expect your illness to affect your life when you go home or back to work?
(b) Has anyone told you about these possible effects?
(c) Please tell me what they said?
19. (a) What care do you think you will need at home after leaving hospital?
(b) Has anyone explained this to you?
20. (a) Whilst you've been in hospital has any particular nurse been most helpful to you?
   If answer is yes then continue with:
   (b) In what way has she been helpful?
21. Are there any questions you would like to ask me?
APPENDIX 2

TRIADIC PRESENTATIONS OF ELEMENTS IN ELICITATION STAGE

<table>
<thead>
<tr>
<th>CARD NUMBER</th>
<th>Patient details presented</th>
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<tbody>
<tr>
<td>1 2 3</td>
<td>Miss.... 91 years, Right Hemicolecotomy.</td>
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<tr>
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<td>Miss.... 23 years, Colectomy</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 57 years, Closure of colostomy.</td>
</tr>
<tr>
<td>2 3 4</td>
<td>Miss.... 23 years, Colectomy</td>
</tr>
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<td></td>
<td>Mrs.... 57 years, Closure of colostomy.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 49 years, Sub-total Colectomy.</td>
</tr>
<tr>
<td>3 4 5</td>
<td>Mrs.... 57 years, Closure of colostomy.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 49 years, Sub-total Colectomy.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 66 years, Hartmans Procedure.</td>
</tr>
<tr>
<td>4 5 6</td>
<td>Mrs.... 49 years, Sub-total Colectomy.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 66 years, Hartmans Procedure.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 58 years, Cholecystectomy.</td>
</tr>
<tr>
<td>5 6 7</td>
<td>Mrs.... 66 years, Hartmans Procedure.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 58 years, Cholecystectomy.</td>
</tr>
<tr>
<td></td>
<td>Mrs.... 64 years, Laparotomy.</td>
</tr>
<tr>
<td>6 7 8</td>
<td>Mrs.... 58 years, Cholecystectomy.</td>
</tr>
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<tr>
<td></td>
<td>Mr.... 63 years, Thoraco-laparotomy</td>
</tr>
<tr>
<td>7 8 9</td>
<td>Mrs.... 64 years, Laparotomy.</td>
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<td>Mr.... 78 years, Neck node biopsy.</td>
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### APPENDIX 2 Continued

#### TRIADIC PRESENTATIONS OF ELEMENTS

<table>
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<tr>
<th>CARD NUMBER</th>
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| 8 9 10      | Mr. . . . . 63 years, Thoraco-laparotomy.  
|             | Mr. . . . . 78 years, Neck node biopsy.  
|             | Mr. . . . . 50 years, Cholecystectomy.  |
| 9 10 11     | Mr. . . . . 78 years, Neck node biopsy.  
|             | Mr. . . . . 50 years, Cholecystectomy.  
|             | Mr. . . . . 39 years, Vagotomy.         |
| 10 11 12    | Mr. . . . . 50 years, Cholecystectomy.  
|             | Mr. . . . . 39 years, Vagotomy.         
|             | Mr. . . . . 65 years, Repair fistula.   |
| 11 12 13    | Mr. . . . . 39 years, Vagotomy.         
|             | Mr. . . . . 65 years, Repair fistula.   
|             | Mr. . . . . 74 years, TUR               |
| 12 13 14    | Mr. . . . . 65 years, Repair fistula.   
|             | Mr. . . . . 74 years, TUR               
|             | Mr. . . . . 68 years, Cystoscopy        |
| 13 14 1     | Mr. . . . . 74 years, TUR               
|             | Mr. . . . . 68 years, Cystoscopy        
|             | Miss . . . . 91 years, Right Hemicolecetomy. |
| 14 1 2      | Mr. . . . . 68 years, Cystoscopy        
|             | Miss . . . . 91 years, Right Hemicolecetomy.  
|             | Miss . . . . 23 years, Colectomy        |
**APPENDIX 3**

**RECORDING SHEET AND LADDERING PROMPTS**

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<tr>
<th>Code No.</th>
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</table>

Tell me an important way in which two of the patients are similar yet different from the third?

Prompts: In terms of how you feel about them as persons? In terms of the demands they make upon you? In terms of your responsibilities towards them? These prompts were only used if the individual nurse had difficulty articulating constructions.
## Specimen Repertory Grid

<table>
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<th>Code No.</th>
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<th>Place of work</th>
<th>Date/Time of interview</th>
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### Patient Code Number

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<tr>
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</table>

Score 1 if the Construct applies strongly
Score 2 if the Construct applies
Score 3 if the Contrast applies strongly
Score 4 if the Contrast applies
APPENDIX 5

NURSE BIOGRAPHICAL QUESTIONNAIRE

Please answer the following questions by placing a ( ) tick opposite the appropriate answer and commenting in full when requested.

1. Code No:
2. Nursing Grade:
   1. Sister .......... 
   2. Staff Nurse .......... 
   3. Other (please .......... 
      specify)
3. Place of Work:
   1. Elicitation hospital........ 
   2. Validation Hospital........ 
   3. Hospital A................. 
   4. Hospital B................. 
4. Specific Workplace
   1. Surgical Ward................. 
   2. Intensive Care Unit........... 
   3. Operating Theatre............ 
   4. Recovery Room............... 
5. Sex
   1. Male.............. 
   2. Female............. 
6. Age ............years 
7. Length of time in .......years ....months present post?
8. Which basic RGN course did you complete?
   1. 3 year RGN course
   2. Graduate degree course
   3. Conversion/Bridging course for E/Ns
   4. Shortened course for graduates
   5. Shortened course for other RNs
   6. Other (please specify)

9. Which other posts have you held since completing your RGN training.

10. Are there any post-basic courses which you have completed?
    1. Yes
    2. No
    Please specify
    1. Critical care/ITU
    2. Anaesthetic course
    3. Theatre course
    4. Oncology course
    5. Cardiothoracic surgery course
    6. Midwifery
    7. Other registration (e.g. Psychiatry, childrens, mental handicap)
    8. Other please specify
APPENDIX 5

BIOGRAPHICAL QUESTIONNAIRE - NURSES

11. Please list below any study-days/short courses or conferences attended during the last three years.

12. Are you satisfied with the nursing staff levels in your present working area?
   1. Yes...........
   2. No............
   3. Don't know.......

Comments:

13. Are patient care-plans used in your working area?
   1. Yes...............  
   2. No...............  
   3. Don't know........

Comments:

14. Are you satisfied with the way in which care-plans are used?
   1. Yes.............
   2. No.............
   3. Undecided........

Comments:

15. State briefly below what you consider to be the most important elements of patient care.

Thank you for your cooperation.
APPENDIX 6 REPERTORY GRID FOR NURSE 1/8 IN ELICITATION

STAGE.

Code No........ 1/8........
Hospital..... Elicitation........
Place of Work..Theatre........
Date/Time of interview.............

**PATIENT CODE NUMBER**

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<td>-0.36</td>
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### APPENDIX 7 CONSTRUCT CORRELATION MATRIX VALIDATION STAGE Continued
APPENDIX 8 ANALYSIS OF VARIANCE FOR THE NURSES

VARIABLES: - USE OF CARE PLANS; PLACE OF WORK; CONFERENCES ATTENDED - HOSPITAL A

<table>
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Use of care plans (CPUSE) and Place of work (WARD) are significant at the 1% level. Conferences attended (CONF) is significant at the 5% level.
APPENDIX 9 ANALYSIS OF VARIANCE FOR THE VARIABLES USE OF
CARE PLANS AND PLACE OF WORK - HOSPITAL A

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</table>

Analysis of variance with CONF illustrates the minimal effect of this variable.
### APPENDIX 10 ANALYSIS OF VARIANCE FOR NURSE VARIABLES

**PLACE OF WORK; CONFERENCES ATTENDED; SATISFACTION WITH STAFFING LEVELS AND USE OF CARE PLANS - HOSPITAL A**

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Place of work (WARD) is significant at the 1% level. Conferences attended (CONF) is significant at the 5% level. Satisfaction with staffing levels (STAFF) and use of care plans (CPUSE) are insignificant.
APPENDIX 11 ANALYSIS OF VARIANCE ON NURSE VARIABLES PLACE OF WORK: RGN COURSE COMPLETED; CONFERENCES ATTENDED; AND AGE OF NURSE - HOSPITAL A

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Place of work (WARD) and type of RGN course completed (QUAL) are significant at the 1% level. Conferences attended (CONF) is significant at the 5% level and the age of the nurse (NAGE) is insignificant.
APPENDIX 12 ANALYSIS OF VARIANCE NURSES VARIABLES PLACE
OF WORK: RGN COURSE COMPLETED; NUMBER OF PREVIOUS POSTS;
CONFERENCES ATTENDED - HOSPITAL A

<table>
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ALL variables significant at the 1% level.
APPENDIX 13  ANALYSIS OF VARIANCE FOR NURSES VARIABLES
PLACE OF WORK; RGN COURSE COMPLETED; POST-BASIC COURSES COMPLETED; NUMBER OF PREVIOUS POSTS; AND CONFERENCES ATTENDED - HOSPITAL A

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</table>

Place of work (WARD), RGN course completed (QUAL), and number of previous posts held (POST) are all significant at the 1% level.
Post-basic courses completed (COUR) and conferences attended (CONF) are insignificant.
APPENDIX 14 ANALYSIS OF VARIANCE PATIENT VARIABLES TYPE OF SURGERY PERFORMED; AGE OF THE PATIENT; SEX OF THE PATIENT; AND ADMISSION STATUS - HOSPITAL A

<table>
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</table>

Type of surgery performed (SURG) is significant at the 1% level.

Admission status (ADMIS) is slightly significant at the 5% level.

The age and sex of the patient are insignificant.